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TENDENCIES IN STATE TAX LEGISLATION AFFECTING THE SUPPORT OF EDUCATION

AS ALL students of public finance are aware, reforms in the tax structure of the country are imperative if the public service is to be supported adequately and equitably. In recent years practically all the states have been faced with the problem of raising additional revenue for pensions, social security, and relief. Some states are experiencing great difficulty in meeting these new demands without curtailing the support of education and other well-established services. At the same time pressure is being brought in many quarters to lighten the tax burden on real property, which has long constituted the chief element in the tax base. In the search for new sources of revenue the tax base is being broadened and the tax structure reformed. This matter of tax reform is of vital interest to all who are concerned with the support of education. It is daily becoming clearer that in the years lying ahead two elements of the population will be in sharp competition for the taxpayer's dollar; these two population elements are the dependent young and the dependent aged. Humanitarianism requires that the indigent and the aged be cared for; the very maintenance of our civilization de-

pend on an adequate education of youth. The development of sound and comprehensive state systems of taxation constitutes a challenge to educational statesmanship that must be met.

In this connection attention is called to a recently published bulletin of the Research Division of the National Education Association. The bulletin is entitled *Tax Legislation Affecting State School Revenues, 1934-38*. It supplements an earlier bulletin which reviewed changes in state tax laws during the years 1929-33.

Tendencies in state tax legislation for the five-year period 1934-38 are described as follows:

Certain tendencies revealed by the legislation reported in the following chapters bear a direct relationship to methods used in financing the public schools and thus appear to be worthy of special mention. Some of these tendencies, no doubt, are only temporary, the immediate outgrowth of the depression, yet they may have far-reaching results. Others are known to have had their roots in the pre-depression era.

States continued after 1934 to take steps, begun in the late years of the depression, to relieve the tax burden on real estate and to ease the payment of delinquent taxes. While some such action was probably taken, at one time or another, by practically every state, this tendency was especially noticeable in rural areas where the collapse of property values, after 1929, was particularly severe and where a large volume of delinquent taxes had accumulated.

Twenty-three states and one territory passed one or more of the following types of measures aimed at property-tax relief and directly or indirectly affecting state revenues for public education, between 1934 and 1938: (1) provision of new or increased homestead exemptions—Alabama, Arkansas, Florida, Louisiana, Minnesota, Mississippi, Utah; (2) provision of new or increased exemptions of tangible or intangible personal property—Georgia, Minnesota, Mississippi, New Jersey, Pennsylvania; (3) extension of exemptions to include property of special classes of taxpayers, such as religious and educational institutions, war veterans, housing authorities, etc.—Alabama, Florida, Georgia, Louisiana, Mississippi, Nebraska, New Hampshire, Pennsylvania, South Carolina, Tennessee, Texas, Puerto Rico; (4) waivers of interest and penalties on delinquent tax payments—Nebraska, New Mexico, South Carolina, Tennessee; (5) allowance of delinquent tax payments in instalments—Arizona, Nebraska, New Mexico, Puerto Rico; and (6) postponement of tax sales and liberalization of provisions for the redemption of land sold for taxes—Alabama, Nebraska, New Mexico, Tennessee, Utah, and Puerto Rico. . . .

Three states (Alabama, Arkansas, and Louisiana) provided for the replacement of state and local property taxes by other types of state tax revenues placed in "property tax relief" and "property tax reduction" funds. Proceeds of income taxes, general sales taxes, and alcoholic beverage excises were earmarked

in part for the reduction of state or local property taxes by three states (Colorado, Louisiana, and Oklahoma), nine states (Alabama, Arizona, Arkansas, Illinois, Kansas, Louisiana, Ohio, Utah, and Wyoming), and two states (Idaho and Louisiana), respectively.

Measures such as those described above increased the need of states for new and larger revenues, both for the financing of their own state activities and as a means of extending aid to local governments. . . .

Between 1934 and 1938 seven new states (Colorado, Iowa, Kentucky, Louisiana, Pennsylvania, South Dakota, and West Virginia) were added to the list of those taxing personal or corporation net income, or both, bringing the total number up to thirty-six. Fifteen states (Alabama, Arkansas, Colorado, Idaho, Iowa, Kansas, Louisiana, Maine, Maryland, Missouri, New Jersey, New Mexico, North Dakota, Ohio, and Wyoming) enacted new general sales tax laws in the years 1934-38. However, in four of these states (Idaho, Maine, Maryland, and New Jersey) the sales tax laws were repealed, rejected by popular referendum, or allowed to expire. Sales tax laws enacted prior to 1934 by three other states (Kentucky, New York, and Oregon) were also repealed or allowed to expire during the 1934-38 period, reducing the net gain in the number of states using general sales taxes to eight.

Gasoline taxes which have been imposed by all states since 1929 and which have become, through the levy of increased or additional rates, the greatest single source of state tax revenue, are used principally for financing the maintenance and construction of highways. Nevertheless, between 1934 and 1938 at least nine state legislatures passed or continued measures which allotted gasoline tax revenues to state general or state educational purposes (Florida, Georgia, Massachusetts, Nebraska, New York, North Carolina, Ohio, Pennsylvania, and Texas).

Alcoholic beverage tax laws passed in nearly all states as recently as 1933 are proving a fruitful source of revenue. Four states (Connecticut, Kentucky, Pennsylvania, and Vermont) derive revenues from new tobacco tax laws. The number of states levying chain-store taxes rose from eighteen in 1933 to twenty-four in 1938. New chain-store tax laws were enacted in eleven states (California, Colorado, Georgia, Iowa, Kentucky, Mississippi, Pennsylvania, South Dakota, Tennessee, and Texas) during the intervening years, but laws of six states (Arizona, California, Delaware, Maine, New Mexico, and Vermont) taxing chain stores were repealed or held unconstitutional. New or increased taxes on corporations, on inheritances and estates, and on the severance of natural resources from the soil or water also provided needed state revenues during the years 1934-38.

Each of the above types of taxes was employed by at least as many states at the end of the five-year period as at the beginning and many of them were far more numerous. All of them increased in number during the decade 1929-38. Whereas in 1929 only about 80 per cent of state tax revenues were derived from non-property tax sources, this per cent had increased to over 93 per cent by 1938.

Only in the case of general sales and chain-store taxes does the number of laws recently repealed suggest the possibility that these taxes may have passed the zenith of their popularity.

EDUCATION AND SOCIAL POLICY IN GERMANY

EDUCATION in Germany has long been particularly sensitive to prevailing political ideas; time and again its purposes and its structure have undergone fundamental change as political power tended to veer to the right or to the left. In the eighteenth century the rulers of Prussia took over the control of education and made it an instrument of state policy. It is a significant fact in the history of Prussia and of Europe that education came under the control of the state before Prussian political and social institutions had been much influenced by the spirit of democracy. The result was that education tended to become an instrument for maintaining the status quo—the absolute monarchy and an economic and social system, many elements of which had originated in the high feudal age. In contrast, public control of education was initiated in France following the Revolution and in England after the Reform Bill of 1867. Similarly, in the United States the dynamics of public education are to be found in the emergence of the democratic state as a form of political organization.

Soon after the opening of the nineteenth century, after Prussia had suffered a humiliating defeat at the hands of Napoleon, the Prussian king surrounded himself with a group of relatively liberal leaders who carried into effect a sweeping program of social reform. In the interval between 1807 and 1815 popular education received a powerful impetus, but after the defeat of Napoleon the Prussian king soon retreated from his somewhat liberal position. As the government grew less liberal, popular education was viewed with increasing misgiving and suspicion. The Revolution in 1848 brought matters to a head: the king laid the blame for the Revolution squarely at the door of the public school. He asserted, in no uncertain terms, that the system of popular education had weaned the loyalty of his subjects from him, and he declared that, as long as he held the sword hilt in his hand, he would know how to deal with such a nuisance. The king was making no idle threats; the government now directed a body blow at popular education. The curriculum in

the normal schools was severely restricted, and the work in the elementary schools was pared down to the mere elements of reading, writing, arithmetic, and religion.

The establishment of the Empire was again the signal for the initiation of a more liberal policy with respect to the education of the masses. German leaders had led well; their victory over France and the unification of Germany had created vast moral values in the mind of the people; there was nowhere on the horizon any articulate group in German life which might hope to challenge successfully the power of the ruling class. Relieved of the fear complex that had gripped the king after the Revolution of 1848, German leadership could now turn its attention safely to the development of a more liberal program of popular education. Normal-school curriculums were enriched, and the *Volksschulen* expanded their work to include more than the bare instrumentalities of culture. Even so, the German educational system at every point reflected the class structure of society. For the masses of children and for their teachers, there was one group of schools; for the directive classes and for their teachers, there was another.

Under the German Republic the democratic elements in German life came into power, and they sought at once to introduce a considerable degree of liberalism into the educational system. Private schools (*Vorschulen*) leading to the secondary schools were abolished, and a single type of school (*Grundschule*) enrolling children from six to ten was made compulsory for all. Normal schools for the training of teachers in the *Volksschulen* were abolished by law; it was planned that henceforth these teachers would be trained in standard secondary schools and in institutions of university rank. A closer articulation of elementary and secondary education was to be provided for by the establishment of a new type of secondary school known as the *Aufbauschule*. Bright pupils in the public elementary school (*Volksschule*) could transfer to the *Aufbauschule* at the age of thirteen and prepare for the university at nineteen. But perhaps the most important change in education under the Republic was its purpose and spirit. Schools now sought to develop individualism and the spirit of free inquiry to a degree hitherto unknown in Germany.

Under the Third Reich, as might have been expected, education

has been made very definitely an instrument of social control and direction. Practically every aspect of educational theory and practice is determined by the prevailing political ideology. Care has been taken to eliminate the elements of liberalism and individualism introduced during the period of the Republic. Now the supreme task of education is to socialize youth in terms of the new regime—to develop the right attitudes of loyalty and submission. Physical education ranks second in importance to the development of proper attitudes. Intellectual accomplishment has fallen from its once high estate; conditioning of the emotions has come to be far more important than the cultivation of the intellect. In the educative process the home and the school have tended to lose a great deal of their old importance. They have been regarded as too conservative; increasingly, reliance has been placed in such institutions as the Hitler Youth Organization and the land year (*Landjahr*). By decree, all German youth are now members of the Hitler Youth Organization, which is made up of the *Hitler-Jugend* (boys fourteen to eighteen), of the *Jungvolk* (boys ten to fourteen), of the *Bund Deutscher Mädel* (girls fifteen to twenty-one), and the *Jungmädel* (girls ten to fifteen). When children in cities reach the age of fourteen, they are required—or at least most of them are supposed to be required—to spend eight months in the country. This activity constitutes what is known as the land year. Children work on farms and in villages, engage in many kinds of sports, and receive “national political instruction.” In these ways it is hoped that they will come to appreciate and understand the country, gain in physical strength and vigor, and become deeply attached to National Socialist ideology.

All who are interested in recent changes in the educational policies of Germany will want to examine carefully a bulletin (No. 15, 1938) of the United States Office of Education which was written by Alina M. Lindegren and which bears the title *Education in Germany*. Chapters are devoted to “Elementary and Secondary Education,” “The Middle Schools,” “The Education of Teachers,” “New Institutions and Education of Jews,” “Professional Study in the Classical Universities,” “The Technical High Schools,” and “Study at Other Higher Institutions.”

As Dr. Lindegren points out, virtually all authority over educa-

tion is now vested in the Führer and his cabinet of about fifteen members. Before the advent of Hitler the various German states were, in large measure, free to develop and manage their own school systems. Now all matters of importance are under the control of the central government.

All German children are required to attend a foundation school (*Grundschule*) for four years (usually from six to ten years of age). During these first four years of school the study of the environment (*Heimatkunde*) is of the greatest importance. As the following quotation from an official document shows, no time is lost in beginning to condition German youth in terms of the National Socialist spirit.

The environmental intuitive instruction (*heimatkundliche Anschauungsunterricht*) of the first and second school years is based on the material of the child's immediate world. It clears, corrects, and broadens his store of concepts and makes him consciously ready to be taught new things.

From the third year on the child learns to know his homeland according to planned method. Furthermore, he is taught the fundamentals of folklore, history, geography, and natural science.

Beginning with the family the child sees people at work and at leisure, in conduct of daily life, customs, manners, language and songs, stories, sagas, and legends. Among stories of local history shall be inserted individual historical pictures insofar as they come within the understanding of the child's age group. The hero thought shall be in the foreground. Heroes of the homeland, of the World War, and of the National Socialist movement, the quiet hero of everyday, and the hero of sagas shall inspire the child.

After four years in the *Grundschule* boys and girls may continue in the upper four years of the *Volksschule* or enter a middle school or a secondary school. After completing the *Volksschule*, at about the age of fourteen, most children prepare for a trade in a part-time continuation or trade school.

Important changes have taken place in secondary education. Under the Republic there were five types of secondary schools: the *Gymnasium*, with emphasis on the classical subjects; the *Realgymnasium*, with emphasis on modern languages and Latin; the *Oberrealschule*, with emphasis on the sciences and other modern subjects; the *Deutsche Oberschule*, emphasizing German culture, and the *Aufbauschule*. This latter type of school had no distinctive program of its own; its curriculum might be that of any of the other types of secondary schools. It was a six-year school, taking pupils from the

Volksschule at the age of thirteen and preparing them for the university at the age of nineteen. Recently the five types of secondary schools have been reduced to three: the *Oberschule* (inspired by the *Deutsche Oberschule* of the Republic), the *Gymnasium*, and the *Aufbauschule*. The classical *Gymnasium*, which for centuries had been dominant in Germany, is now relegated to a place of minor importance. Henceforth the *Oberschule* will be the dominant type.

The higher schools for girls have also been reorganized. Now there are only two types of higher schools for girls: the *Aufbauschule* and the *Oberschule*, neither of which makes much attempt to prepare girls for the university.

The characteristics of the realignment of secondary education are described by Dr. Lindegren as follows:

Chief among the features of this general realignment of secondary education is the standardization of instruction through one main type of school and two subordinate types, all with programs imposed by the ministry for the entire Reich, a countertrend to the former many varieties of training leading to higher education. Next comes the turning toward the subjects commonly termed "practical," such as modern languages, mathematics, and sciences, and the definite lessening of opportunities to study the classics. The attempt to shorten the time preparatory to university studies is a further consideration, but it must be borne in mind that on March 16, 1935, the Reich repudiated the rearmament clauses in the Treaty of Versailles and two years of military service are now compulsory for men. This with the six months of compulsory work service (*Arbeitsdienst*) more than counteracts the one year gained in the schools.

Moreover, the swing is evidently away from the policies of the Republic with respect to making secondary and higher education more freely available and more democratic. Changing over from the elementary- to the secondary-school system is harder rather than easier and fewer students, not more, are to be made ready for, and admitted to, the universities. Fees will still be charged by the secondary schools, but it is expected that exemptions, scholarships, and similar arrangements will make it possible for poor but worthy children to acquire a secondary education.

The selection of pupils for the secondary schools is based on character, physical fitness, mental ability, and national fitness. This last term means mainly agreement with the ideas of the National Socialist party. The purpose of the secondary school, the principles governing the selection of pupils, and their promotion from class to class are all expressed in a decree of March 27, 1935, issued by the minister. It applies to both boys and girls. . . .

By decrees of February 12, 1934, and January 29, 1936, the minister announced that girls were not to be admitted to schools for boys in localities where there were separate secondary and middle schools for girls, except in specially

approved instances. In a community with only one secondary school, however, girls and boys could attend the same school. The decree of January 29, 1938, states that coeducation is contrary to the spirit of National Socialist education. It forbids the admission of boys to schools for girls, provides that only in special instances may girls attend a school for boys; and that when they do, the instruction they receive must be arranged as far as possible in line with that at a girls' school. Further, admission of a girl to classes 6 to 8 at a boys' school must be exceptional and requires in each instance the approval of the upper president or of the chief education authority of the state. Only with the consent of the minister may a girl be admitted to the *Gymnasium* for here special arrangements for her education cannot be made. Girls are almost denied admission to the universities because Latin is so nearly eliminated from the curriculums of the girls' schools. The home-economics line of the upper schools and the upper school in *Aufbau* form are in accord with the National Socialist policy of keeping women within the home.

HERE AND THERE AMONG THE SCHOOLS

DURING the coming year we shall continue to include "Here and There among the Schools" as a special feature of the *Elementary School Journal*. This feature affords us the opportunity of presenting to our readers accounts of innovating practices in administration, in the organization of the content of instruction, in methods of teaching—in fact, in the whole area of educational activity. Superintendents, principals, and teachers are cordially invited to submit to us accounts of new approaches to the solution of their problems which may be of interest to other workers in the field.

Items selected for discussion in this number of the *Elementary School Journal* relate to the legality of signatures in manuscript style of writing, a concrete illustration of modes of procedure in the development of units of work, an experiment with a new type of learning experience, and individualized instruction.

Legal validity of signatures in manuscript style In Winnetka, Illinois, where the manuscript style of writing is taught in the schools, the question has been raised whether a signature in this form of writing is legally valid when attached to a check or other legal document. Superintendent Carleton Washburne has secured an opinion on the matter from his school attorney, Mr. Frederic O. Mason, a member of the firm of Miller, Gorham, Wescott, and Adams, of Chicago. This opinion should be of interest to teachers and administrators in school systems employ-

ing the manuscript form of writing. Superintendent Washburne has supplied us with a copy of Mr. Mason's opinion.

In legal contemplation "to sign" means to attach a name, or cause it to be attached, by any of the known methods of impressing the name on paper with the intention of signing it. (See 58 *Corpus Juris* 718, citing *Lamaster v. Wilkerson*, 143 Ky. 226.) The primary sense of the words "to sign" is to make any mark upon a document in token of knowledge, approval, or acceptance (*In re Walker*, 110 Cal. 387). A party may use any character, symbol, figures, or designation he thinks proper to adopt as a signature and be bound thereby, provided it was used as a substitute for his name. Where an instrument is required to be signed, it is usually sufficient if the signature is affixed in any manner that is commonly used. The Illinois Supreme Court in the case of *Weston v. Myers* (33 Ill. 430) has laid it down that it makes no difference so far as a man's liability upon a contract is concerned "whether he wrote his name in script or Roman letters, or whether such letters were made with a pen or with type, or whether he printed, engraved, photographed, or lithographed them, so long as he has adopted and issued the signature as his own."

In the case of a will the testator would doubtless have to use his own handwriting, but there is nothing in either the statute or the cases which would require him to use any particular style or mode of writing. A mere mark would be sufficient. I therefore am firmly of the opinion that the present method of teaching handwriting used in the Winnetka schools is perfectly legal and valid.

An illustration of procedure in the developing of a safety-education unit The second number of the University of Michigan Elementary School Curriculum Reports bears the title *The Eleven-Year-Olds Study Safety*. The purpose of these reports is described in the Foreword as follows:

The reports are published chiefly to illustrate a mode of procedure in curriculum development and to give useful assistance to teachers in developing those areas which are likely to recur because of the functional needs and interests of children. It should be noted that the units published in this series originate on the basis of child participation in the determination of curriculum content. They describe experience in process and are written during and after the events. They are not prepared as elements to be put into a fixed curriculum but are sample experiences from an emergent curriculum.

A voluntary learning experiment in Nash, Texas In a pamphlet entitled *The Nash Plan*, Travis A. Elliott, superintendent of schools in Nash, Texas, describes an interesting experiment in the development of a new type of teaching unit applicable to the first nine years of school. In the first part of

the pamphlet Mr. Elliott points out what he considers the shortcomings of such traditional units as the subject unit, the project unit, and the integrated activity unit. The unit employed in the Nash system is known as the "adowe" unit, the word "adowe" being composed of the first letter of each word in the expression, "Any division of wholesome experience." The "adowe" unit stresses voluntary learning, but it also provides for compulsory learning.

The following paragraphs describe the operation of the Nash plan.

The mornings are devoted chiefly to individual drills in the tools of learning, namely, reading, writing, arithmetic, and correct usage, both oral and written. It is believed that mastery of the tools of learning can be realized with less time and greater efficiency through the use of carefully selected workbook materials than through the use of textbooks, for it is possible for the teacher to conduct drills in two different grades concurrently, and better adaptation to individual needs in the tool subjects can be afforded.

There are also included in the morning schedule the other traditional subjects, but a minimum of time is devoted to them. These traditional subjects are included merely for protection against public criticism which invariably befalls any school administration which undertakes to experiment with children. The minimizing of time devoted to the traditional subjects which do not properly belong to the adowe unit procedure is facilitated by the use of workbook materials. In actual practice the teachers give complete precedence to the maintenance of standards of sufficiency in the tools of learning during the morning sessions and devote whatever time is left to the traditional subjects not properly belonging to the Nash plan. It is hoped that in the near future public opinion will permit complete abandonment of these subject-matter specializations.

The afternoons in the Nash School are given over almost entirely to voluntary learning. Provision is made for additional drills in the tool subjects for a few pupils who are greatly retarded or handicapped in these skills. The aim of the school during the afternoon is to conduct an environmental situation which is conducive to wholesome learning experiences by each child. This condition is more nearly completely realized with the junior high school pupils, who may enjoy silent reading in a large, quiet room, or natural-science experimentation in a laboratory, or manipulative experiences in the shop, or music experiences in the form of singing, listening to the radio, and playing of instruments, or any number of club activities.

It should be re-emphasized that the children are not free to do anything they want to do, but that they are free to select any of the wholesome experiences which school environment can provide. It should also be made clear that a proper respect for the rights of others is demanded of the children in every situation of the entire school day. It is often necessary to make divisions be-

tween quiet and noisy activities in the elementary rooms where plant facilities are inadequate.

Each child is permitted to shift his learning experiences at will, according to his cycles of interest. For example, a boy may spend fifteen minutes in the science laboratory using the microscope, go to the reading room and read for an hour, and then turn to the workshop to make a magazine rack.

Mr. Elliott describes at some length the practical operation of the plan. He presents types of units as they were actually worked out by pupils. The pamphlet also includes statements which reveal how pupils, teachers, and professional experts react to the plan. The following paragraphs indicate the accomplishment of Nash pupils on standardized achievement tests.

Although the Nash plan takes no cognizance of specialized subject-matter achievement, standardized achievement tests were administered to the seventh-grade pupils in all traditional subjects and to the pupils of the seventh, eighth, and ninth grades in English.

In the seventh grade The New-South Achievement Tests (H. Gray and D. F. Votaw, The New-South Achievement Tests, Austin, Texas: Steck Co., 1936) were used. In the Nash School 23.1 per cent of the pupils in the seventh grade were in the *above-grade* section, while the standards revealed that 21.4 per cent should normally be *above grade*. While standardized results reveal that 50 per cent of the seventh-grade pupils should be in the *at-grade* section, 53.8 per cent of the Nash pupils were in this section. Of the Nash seventh-grade pupils 23.1 per cent were *below grade* as compared with the 28.6 per cent normally expected to be *below grade*.

By these results it can be seen that although subject-matter achievement was not stressed as such under the Nash plan, the pupils of the seventh grade were above standard in achievement in the traditional subject-matter courses.

The Clapp-Young English Tests (Houghton Mifflin Co., 1939) were given to the pupils of the seventh, eighth, and ninth grades. Form A was given at the beginning of the school year, and Form B was given two weeks before the close of the year.

At the beginning of the school year the median for the seventh grade was 74, which was one below standard. At the end of the school year the seventh-grade median was 81, or one above standard.

The median for the eighth grade at the beginning of the year was 82, as compared with the standard of 80. By the end of the school year the median had moved to 89. The standard median for the eighth grade at the end of the year is 85, while the standard at the end of the ninth grade is 88. Therefore, the median for eighth-grade pupils in the Nash School was one above the standard median for ninth-grade pupils at the end of the school year.

At the beginning of the year the median for the ninth grade was 83, or two

below standard. At the end of the school year the median was advanced to 88, which is exactly standard.

The average achievement shown by the tests for the year was 6.1 as compared with the average standard achievement of 4.3 for the three grades. In other words, the pupils in the seventh, eighth, and ninth grades of the Nash School achieved approximately 42 per cent more in English than was expected by the standards.

This was the first year that pupils of the Nash School had exceeded the established norms on the English tests. The amount of time devoted to English was no greater than it had been in previous years. The notable improvement in English is attributed to the adowe procedure in correct usage and the program of sufficiency testing embracing individual remedial work.

Individualized instruction The following statement with regard to *in a city school system* individualized instruction in the tool subjects was supplied by Arthur Gould, deputy superintendent of schools of Los Angeles, California.

Years ago we gave up the idea that all children of the same age had attained or could attain the same proficiency in school subjects. For some time thereafter we believed that children of the same *mental* age, as determined by tests, could and should achieve the same mastery of fundamentals. Experience proved this assumption to be nearer the truth but still inaccurate enough to be unsatisfactory. Research based on our records of children's attainments (records dating back continuously for the past fifteen or more years) convinced us that the "achievement age" of pupils lies between the chronological and the mental age, though nearer the latter. Experiment and research by statisticians finally evolved a simple formula $\frac{C.A. + 2M.A.}{3}$ which is extremely useful in helping

to determine whether pupils are working up to capacity, whether they are lying down on the job, or whether they are being urged and prodded to attain a standard which is beyond them. This knowledge enables teachers to plan the pupils' work to suit their capacities and needs much more satisfactorily.

A NATIONAL COMMISSION ON CURRICULUM PLANNING

THE National Council of Teachers of English has released the following statement.

Sixteen educational organizations have now become sponsors of the National Commission on Co-operative Curriculum Planning, which will make its first reports next year. The commission announces that its purposes are (1) to study ways in which teachers trained in their respective fields can most effectively contribute to a program of general education and (2) to develop curriculum units (so far as possible in actual school situations) based on learner's real life

experiences and aiming at effective participation in the affairs of a democratic society.

The commission was organized at a conference in Detroit in February, with John J. DeBoer, of Chicago Teachers College, representative of the National Council of Teachers of English, as chairman; and Miss Lilly Lindquist of Wayne University, Detroit, representative of the National Federation of Foreign Language Teachers, secretary-treasurer.

The Society for Curriculum Study has appointed a committee to assist the commission, consisting of W. S. Gray, University of Chicago; Malcolm MacLean, University of Minnesota; Paul Misner, superintendent of schools, Glen-coe, Illinois; Holland D. Roberts, Stanford University; and B. O. Smith, University of Illinois.

The commission will make use of available reports on curriculum-building and then, aided by committees in selected communities, will prepare outlines for curriculum-planning and reports of actual curriculum units co-operatively developed by school staffs.

WHO'S WHO FOR SEPTEMBER

The authors of articles in the current issue LLOYD ALLEN COOK, associate professor of sociology at Ohio State University.

ERNEST E. BAYLES, associate professor of education at the University of Kansas. WILLIAM H. JOHNSON, superintendent of schools at Chicago, Illinois. ARTHUR E. TRAXLER, assistant director of the Educational Records Bureau, New York City. EDWARD E. KEENER, principal of the John Hay School, Chicago, Illinois. LEO J. BRUECKNER, professor of elementary education at the University of Minnesota.

The writers of reviews in the current issue HENRY J. OTTO, consultant in education of the W. K. Kellogg Foundation, Battle Creek, Michigan. HOMER P. RAINEY, president of the University of Texas. WILLIAM CLARK TROW, professor of educational psychology at the University of Michigan. R. M. TRYON, professor of the teaching of the social sciences at the University of Chicago. HOWARD R. ANDERSON, associate professor of education at Cornell University; chairman of the Junior and Senior High School Social Studies Department in the public schools of Ithaca, New York, and director of student teaching in co-operation with Cornell University. FREMONT P. WIRTH, professor of the teaching of history at George Peabody College for Teachers.

DEMOCRACY AS AN AGENCY OF SOCIAL CONTROL

LLOYD ALLEN COOK

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IT HAS been said that a happy people have no history, and so with a well-working scheme of life. Our way of living we call democracy, and it obviously is not working well. "There is in America," writes Laski, "a wider disillusionment with democracy, a greater skepticism about popular institutions, than at any period in its history."¹ Every pattern of living would seem to have a climate which it prefers, an environment most favorable to its growth and development. That milieu for democracy is peace and prosperity, not war or threats of war, chronic unemployment, business demoralization, and other ills of a sick society. Dictators make capital of these disorders; democracies deal with them after a fashion and with loss to basic principles. What I desire to do is to consider the nature and the meaning of democracy, offer an interpretation of our evolving social scene, and conclude with certain implications for schools and the administration of schools.

NATURE OF DEMOCRACY

Like other great abstractions, the concept of democracy suffers from unclear meanings and deep evaluative content. With the abstraction we glorify friends, condemn enemies, and justify an amazing number of undemocratic practices. Much of this vagueness is seen when democracy is compared with rival political systems. Democracy is government by all the people; dictatorship is rule by the strong man. Democracy is unrestrained freedom; dictatorship is regimentation. Democracy rests on intelligence; dictatorship, on force and emotions. Democracy is man's road to the perfect, harmonious, and orderly universe. When I assert that these pictures

¹ Harold J. Laski, *Democracy in Crisis*, p. 47 Chapel Hill, North Carolina: University of North Carolina Press, 1935

in our heads are but half-truths, the reader will be reminded of T. V. Smith's little poem:

In moments controversial my
perception is quite fine;
I always see both points of view - -
the one that's wrong and mine.

Let us inspect two bits of democratic ideology. One holds that political democracy is government by the will of the people—an inclusive public mind. The other, a correlate, affirms that elected representatives are but agents of that mind. In a study of almost a thousand teachers, administrators, and graduate students in education, about 90 per cent said they believed these two propositions. Moreover, on a twenty-point scale of belief-disbelief, three-fourths checked themselves within the range defined in the questionnaire as "Strong belief, allows no doubt."

Reflection will show the doubtful nature of these views. We do not "liquidate" Nazi *Bund* members and other rabble-rousers, and there is no public opinion that we should do so. Our reactions are guided by long established customs, as instanced in the Bill of Rights. This course is social control by the mores, and it is as nearly government of, by, and for the people as we shall ever know. It stands in sharp contrast to control by public opinion. Such opinion can exist only on disputed issues, and its rule is the rule of a working majority. I need not add that this "majority" may be so small as to form only a minor part of the potential public.

Likewise, the idea that government exists merely to carry out the will of the governed oversimplifies reality. It ignores the profound differences in personalities of men in office—their varied impulses and ambitions, ideas of duty, strategy, etc. It underestimates the influence of organized pressure groups, each with a special interest to protect. Most of all, it assumes a mechanism not now in use: a device for determining overnight the shifting opinion of the masses. Is Congress, in passing a neutrality bill, or the President, in devaluing the dollar, giving effect to the will of the people? We may hope so, perhaps, but who knows? Who can ferret out cause and effect, the interaction of leader and led?

Use by government of a kind of Gallup survey would help, but

it would not solve the problem. In an age of instantaneous communication, views and values shift rapidly, and a poll could only show them at a given moment of time. It would freeze them, whereas in fact they are a fluidity, a process. Thus unrepresentativeness in public affairs is inescapable, though not quite so bad as pictured.

One may push these criticisms too far and miss basic differences between democracy and other forms of government. In 1748 Montesquieu wrote, "When the body of a people in a republic are possessed of the supreme power, this is called a *democracy*."¹ In fairness it should be said that all governments show some regard for the wishes of the masses; Machiavelli's prince was instructed to do so. Under a democracy, however, much greater weight is attached to public opinion, and much greater concern is shown for the good of all. This point is significant but is too often taken for granted. By electing our own leaders to office, by keeping as informed as possible on their stands, by subjecting men and measures to periodic vote, we endeavor to meet the crucial problem facing all government—the problem of stability and change.

Furthermore, we dare not ignore the conditions under which public attitudes are formed and expressed. A democracy provides the only climate in which real differences of opinion are possible—freedom to think without restraint, to act without fear of reprisal, and to decide debatable issues in terms of their merits. Nobody can understand American life without a careful study of such constitutional rights.

The idea of rights leads to a view of democracy which places the concept more clearly within the field of educational action. Any society is, at bottom, a series of claims made by its members on one another and recognized as normal and binding. From this standpoint democracy has always been more than a political system. It has been a scheme of social living, a conscious effort to organize life so that all persons can participate with increasing intelligence in creating the values to which they give allegiance.

One way to get at the essence of this viewpoint is to assume that means and ends are different and can be isolated. By "means" is

¹ M. de Secondat, Baron de Montesquieu, *The Spirit of Laws*, I, 8. Translated by Thomas Nugent. London, George Bell & Sons, 1878

understood all forms of co-operative action, such as fact-finding, discussion, and decision-making; and by "ends" is meant such values as respect for personality, the common good, and so on. Can we now say that democracy is anything arrived at democratically? Consider a case. It is said that Lincoln polled his cabinet on the Emancipation Proclamation and they voted it down. His comment was, "The ayes have it," and the measure was put into effect. If one's idea of democracy turns on means, this action was dictatorship. If it turns on ends, Lincoln's action was democratic, for by it all negro Americans have had a better opportunity to share in our common life.

If ends count for more than means, a person can be democratic even if forced to use coercion to protect imperative values, such as free discussion. From this standpoint, ends not only justify means but define them as democratic. If, on the contrary, we weight means more than ends, our position will be the opposite of this point of view; that is, no ends can be good if the means are bad.

Both these views assume that democracy is an "all-or-none" quality, not a "more-or-less," and they force a choice between two illogical extremes. For my own part I find a third position more tenable. When both means and ends are democratic, for example, co-operative action to secure a common good, we have democracy at its highest level. If neither means nor ends are democratic, as when a dictator manipulates people for his own advantage, we are clearly outside the field of democratic action. The rub comes when we consider the remaining two combinations. If ends are democratic but means are the opposite, most of us might agree that the results may be called low-level democracy. The reverse can, however, scarcely be true.

In substance, democracy defines a plan of living in which persons unite to achieve a common purpose. Each will share in the process according to competency, and each will have some part in determining final outcomes. This view implies a respect for minorities which is a long sea mile from the rule of the majority. Democracy not only invites differences; it encourages them and profits by the new leaven which they bring. Differences can, however, mean set opposition,

and any democratic group must be conceded the right to protect itself against destruction. Deadlocks must be broken; obstructionists must be dealt with by the power of facts, by psychological insight, social pressure, and force if necessary. Thus democracy implies a leadership of technical expertness, emotional concern, and skill in managing the group process.

THE CHANGING SOCIAL SCENE

No democracy exists in a vacuum; it exists where people are trying to solve emergent problems. One despairs of ever comprehending the changing culture in which we live. From the Jeffersonian ideal of the less government the better, we have traveled a long and devious road. Expanding functions of government in relief and welfare, health, industry, criminal justice, radio, research, zoning, etc., are well known, as are increasing tendencies toward centralization of government and government's use of "emergency powers." The swing and the speed of change have left some ten million unemployed, five million marginal farmers, over four million young persons out of school and not at work, and an untold number of the "ill-fed."

Like Alice in Wonderland, we live in a strange world—a world far less brave than pictured. We live in a nation of gigantic size, vast natural resources, great technological progress, unsurpassed promise, gross inequalities, and unbelievable want. We live in a transitional order—transitional from a loose federation of small rural states to a massive corporation of heterogeneous urban-industrial units, whose very fitness for survival is yet to be demonstrated. With fortune piled high on fortune, with gadget added to gadget, we have nonetheless lost a sense of security, for *we have lost direction*. In such times people are haunted by a ghastly fear: the fear of revolution. To avoid fascism, they take refuge in communism, abandoning democracy as a weak and flabby system.

Can we hope to grasp the nub of these things without distorting the seamless web of history? Frankly I do not know. For me at least, perspective becomes clearer if these trends are cast on their community backgrounds. In essence the change is from primary to

secondary communities, and in this transition is the record of what has happened to us as a people.

Over the long stretch of our historic past we have been preponderately a rural people. We have worked with our hands, trusted our gumption, produced to consume and then to sell, and come freely together to share experience. We lived then on the land, and the land was tied to a village or town center. Town and countryside has been America's most familiar form of settlement, the pattern in which the nation came of age.

Persons of town and country origins will understand when I say that this community was, first and last, a perceptual entity.¹ One could grasp its patterns through the senses—see, hear, taste, touch, and smell them. The area itself was small, and a person knew when he had passed beyond its borders. Its life was intimate, highly self-contained, and relatively simple. Houses needed no numbers; people had names; they had histories and were neighbors. The community itself possessed a rich heritage of fact and fiction: somebody founded it, defended it, rebuilt it after the fire. It was in essence a folk culture, as seen in the rigidity of custom, the dominance of tradition, and the slow tempo of change. A person knew then what to do, for he knew what was expected of him.

To note that the scene has changed is to state a commonplace. Under the impact of forces too complex for brief analysis, the warm and intimate unity of the primary group has all but disappeared. In its place stands the secondary community—the great city with its hinterland. This transition is told in census figures which I shall not cite. It is a history of urbanization, the call of shop and factory, and the spread of city ways over the countryside.

The metropolis is not always regarded as a community—and for just cause. Its physical size is so vast, its history so little known to its inhabitants, its population so diverse and mobile, its problems so far removed from ordinary experience, its achievements so little a matter of common pride, that the average person makes no pretense of understanding urban life as a whole. He can visualize his street or district but not the city. Like other people, he learns

¹ Lloyd Allen Cook, *Community Backgrounds of Education*, pp. 34-52 New York: McGraw-Hill Book Co., Inc., 1938.

about its happenings from the press and the radio. He has a vote but little voice in government, a civic duty to perform but no way of doing it intelligently. When he takes stock of the situation at all, he thinks of the points at which the urban organism breaks down—bread lines, sweatshops, organized crime, protected vice, and corrupt politics. Yet the city is a community because it functions as one in providing a host of public services and in getting public business done. If the community concept is not to be abandoned as outmoded, it must be applied to these and other corporate undertakings.

More perhaps than any other factor, size and its correlates (density, heterogeneity, and mobility)¹ give pattern to urban living. As Darwin pointed out in studies of plant and animal worlds, increase in numbers where area is constant intensifies the struggle for existence. In the giant city, competition tends to replace primary-group co-operation. People are sorted and sifted, not only into homogeneous ethnic and economic areas, but by skills, abilities, tastes, and achievements. They struggle for air and space, wealth and power, rank and position; and the process is largely impersonal. Out of this interaction comes a unity which is often overlooked by students of the problem. Urbanites can live together because they are different, and, since they are different, their interdependence is great.

On the subjective side the secondary community reveals new mechanisms by which people relate themselves to one another. Physical contacts are numerous and close; yet social contacts are few and distant. Neighbors become nigh-dwellers, and nigh-dwellers at worst are irritations or statistics; at best, conveniences. They stand in the role of utilities to each other—butter, baker, teacher, preacher. Since they do not meet as whole persons but as segmented beings, each can know only a phase of the other's life. This condition places a premium on visual recognition, rationality, and sophistication. We see a face and infer the person's character. We see a uniform, badge, or other symbol and judge the wearer's inner nature, bank account, and prospects.

We have, as it were, taken root and grown up in one world, the

¹ Louis Wirth, "Urbanism as a Way of Life," *American Journal of Sociology*, XLIV (July, 1938), 1-24.

primary community, and then elected to continue life in another. This shift has profound significance for democracy and for education, greater import than we now know or suspect. Insight here is the task of a lifetime, not of an hour. Hence random comments can only be inadequate.

DEMOCRACY IN PRACTICE

In settling the country, our ancestors faced a wilderness, and the wilderness has always been a great leveler of men. On the frontier, then as later, democracy took deep rootage. Yet in many ways democracy was a gift more than an achievement. It was a gift from the strong to the weak; hence dependent on caprice and circumstance.

Along the settled seaboard, conditions differed little from those of the back country, except to give evidence of the rise of the present class structure. A hundred years ago de Tocqueville wrote:

Not only are the rich not compactly united amongst themselves, but there is no real bond between them and the poor. . . . The workman is generally dependent on the master, but not on any particular master: these two men meet in the factory, but know not each other elsewhere; and whilst they come into contact on one point, they stand very wide apart on all others.¹

Many persons have seen in our primary communities the heart and center of democratic living. Here are traditions of the good neighbor: the town meeting, individual initiative, and common concern. Here also is the rule of mass folk power, and, for those who have suffered from it, little more need be said. I well remember a small boy who chased and caught a negro youth. While pummeling his victim with great vigor, the white boy was pulled off by an adult townsman. "Don't hit a nigger with your fists. Always use a club." Good form is sharply defined in race relations as in other aspects of social living, and small-town mores are not conducive to creative thought and action.

Great cities are not known for their democracy; yet, wherever a massing of population occurs, a process of leveling takes place. Being highly interdependent, urban dwellers must co-ordinate their skills and abilities. Sheer heterogeneity forces a degree of tolerance

¹ Alexis de Tocqueville, *Democracy in America*, II, 196. Translated by Henry Reeve. Cambridge, Massachusetts: Sever & Francis, 1864 (fourth edition).

which tends to undermine racial caste and to weaken the class structure. Mobility has the same effect, for its ultimate meaning is freedom—freedom in last resort to move in space and status. Finally, city people are serviced by the same set of basic institutions, such as schools and agencies of communication. These institutions cater to a mass clientele in which the lowest common denominator seems of greatest importance.

These influences appear to further democratic action, but they are offset by other forces. For example, what city person faces an election with the time, the interest, or the knowledge necessary for intelligent decision? What one of us feels that he plays a responsible part in shaping local or national destiny? What one knows the President's meaning when he warns us to beware of Tories, reactionaries, and economic royalists? Our world, somehow, has grown too big, too out of sight and out of mind. We quiet our consciences with the familiar refrain of "Let Washington do it," not realizing that, when democracy dies in local areas it is, as my youngster puts it, "dead all over." We are, typically, the "frustrated humans" of Mumford's "insensate industrial towns," where there is no art of communal living, no institution capable of uniting the people.¹

Of the inferences which might be drawn from these remarks, I shall make but three. First, few of us can say with Paul, "I am . . . a citizen of no mean city," for urban habitats are not good places in which to live. When rated on a variety of factors, including democracy, our towns and cities leave much to be desired.² Second, can we be honest enough with ourselves to define the task ahead for what it is? It is not the revival of a heritage, as is so often said, for we cannot restore what the nation never had. True, we live in a democracy, yet we have never had democracy *as a way of living*—and there is a difference. If we really want this quality of mind and action, we must work for it, as we have done in newer forms of family patterns, trade unionism, consumers' co-operation, interracial movements, public forums, and co-ordinating councils.

¹ Lewis Mumford, *The Culture of Cities*. New York: Harcourt, Brace & Co., 1938.

² See ratings of 310 cities by E. L. Thorndike, *Your City*. New York: Harcourt, Brace & Co., 1939.

Third, is it not plain that schools cannot be expected to cure a disease with which they daily infect children? They cannot democratize life if they remain highly undemocratic. This problem is difficult, for it demands that we, as educators, get a new grip on the culture that creates and supports us.

TOWARD DEMOCRATIC EDUCATION

In broad theory the educative problem is no different today from what it was in the past. We have a culture—the heritage of our people. We have the undeveloped personality—a candidate for acculturation. The problem has always been that of bringing the two together; the process, we call education. In traditional schools this task was, and is, achieved by unloading the heritage on the child. Tired of lesson mastery as a basic aim, progressive schools have cast off the heritage, or tried to, and have enthroned the child. This change is significant, one on which brief comment will appear dogmatic.

In following the “interests” of children, extreme progressivism has made a real mistake. It has ignored both organic and cultural imperatives. What difference does it make whether a child is interested in protecting his body against bacteria? He *must* if he would live. What difference does it make whether he is interested in reading? He *must* be able to read in present-day America. The major point will not be missed if now I admit that it does make a difference, that we all learn better when motivated by interest. Yet the “musts” of our life together dare not be ignored, and to slip them in as “needs” is commendable if we know what we are doing. For human needs, on last analysis, are simply personal definitions of so-called “objective facts,” and, as long as teachers know more than pupils, their purposes will give final direction to the schooling process.

In essence the educative problem has not changed, but in concrete reality it differs from anything ever known. In the old horse-and-buggy community, schools were unimportant. No teacher carried the burden of the world on his shoulders or undertook the education of the whole child. He instructed in a few skills, heard recitations, closed the book, and went home. Education was a function of the entire community, and it caught the learner in an inte-

grated life-pattern. Children came face to face with reality, and they learned by taking part in whatever needed to be done.

We all know that this situation has changed. Our culture has split into conflicting pieces, and life presents itself as a series of alternatives, each of which is in plain sight. We know, too, that, as parents, we have invented "work" for youngsters when, as children, real chores pressed in upon us from all sides. We know, finally, how completely the "like father, like son" attitude has lost meaning, for we have perhaps made the discovery that, after a child is paid for, he is not really the parents' child. He belongs to the street-corner gang, the romantic movie, the sensational broadcast, the escapist novel, the absurd comics. We know these things, and yet we wonder what schools should be and should do in order to enrich the quality of democratic living.

Clearly we need to get into schooling as much as possible of the real concerns of children, and we also need to get into their schooling a sense of social direction. These needs can only mean a more organic relation with the world outside the four walls. Elsewhere I have called this type of education the "community school"¹ because it organizes experience for life, not in an abstract "changing world," but in perceptual part-wholes of that world—local and nonlocal communities. Such schools differ, as is to be expected, yet they have many things in common. For example, they use community resources in all phases of their programs, and they function as service centers and co-ordinators of non-school groups. Most of them make some kind of life-activities approach to the curriculum and thus combine heritage and need in their most practical forms: the behaviors of maturing children. Moreover, they season much of their teaching with the intent of democratizing life, as the following discussion of a fifth-grade class will illustrate. The question under consideration was, "What do we do for our village?"

John: "Nothing, I say, nothing."

Charles: "Nothing for me. I'm too busy."

Teacher: "What do you do, Mary?"

Mary: "Oh, just pick up things. Keep my yard clean, and that way."

John: "Yeh, 'cause your mother makes you. That ain't for the village."

¹ Lloyd Allen Cook, *op cit*

Mary: "She don't either. It's my yard. I keep it clean."

Teacher: "If we all kept our yards clean, would that help the village?"

Ellen: "No, I say it wouldn't."

William: "I say it would. Take all the yards. If they are dirty, ain't that heck!"

Class: "That's right. Bill's right, Ellen's wrong."

Teacher [taking new lead]: "Do you know the vacant lot at the corner of South and Main?"

Clark: "Sure, My gang plays ball there. Anybody plays there."

Randall: "Nobody has to keep it clean. Throw stuff if you want."

Mary: "Well, I'd like to know why! Somebody owns it, don't they?"

William: "Naw, it's the village's. It belongs to the village."

Teacher: "What do we mean by that? Do we mean that it belongs to all of us together?"

John: "No, to city council. It meets on Monday night. My dad's on it . . ."

Landis: "But you can still throw stuff there. Nobody cares if you do."

William: "That would be heck! Keepin' yards clean and throwin' stuff there. Makes me sick . . ."

I have taken enough of this verbatim record to indicate the nature of teacher purpose and pupil thinking. In reflecting on this incident, I am reminded of another group in a different school. This group showed great loyalty to the home room but was wholly indifferent to the appearance and the upkeep of the hall. Children mirror a culture, and their adult images are found at every level of American life.

In general, young people get pretty clear notions of a private good, so to speak, but acquire little idea of the public good, of its institutionalization, and of our continued responsibility for its realization. To put the matter otherwise, we turn out passable family members, job-holders, club-joiners, party-workers, and church-goers; but, when it comes to active, hustling community members, our batting average takes a slump. We do not run the school, or even teach it,¹ as a community of scholars, and that is our fault. More, the drift of our culture is against the elemental axiom that the welfare of each must be the concern of all.

These statements imply some criticism of school people, and few

¹ *Teaching the School as a Social Institution*. Eleventh Yearbook of the Department of Elementary School Principals of the Michigan Education Association. Lansing, Michigan: Michigan Education Association, 1939.

of us would claim perfection. School heads differ, and in my work with them I emerge with two pictures. The most common method of administration is despotic—wise and just perhaps, but despotic. It is the line-and-staff organization, orders sifting down from outside and above, and persons getting along by doing what the “boss-man” says. This type of administration is directly correlated with the curriculum, and its standard product is weighed and measured, carded and filed in the recent Carnegie report on *The Student and His Knowledge*.¹ To limit tests to residues of formal learning may show a misconception both of mind and of learning.

I have seen, also, administration of another kind: a government in which people in school and outside try to think and act in light of common purposes. Regardless of origins, ideas are sifted through group discussion, facts are used to narrow areas of difference, and a decision emerges as a consensus of staff and students, school and community. Administrators are stimulators of co-operative action, co-ordinators of problems and resources. Knowing the weaknesses of democracies, they seek to preserve an atmosphere in which intelligence can function. They make mistakes and many of them, yet failure is always relative to the goals attempted.

Democratic administration encounters from the start the problem of efficiency. How well I remember the first time I heard a superintendent of schools say to his teachers, “I bow to no one in my allegiance to democracy, but we must get things done!” Under this doctrine of efficiency, we were rushed into action with no concern for the question of “efficiency for what?” What we want by way of outcomes in education would seem to be of ultimate importance—the pivot on which all democratic action might be expected to turn. It seems inevitable in schools, as in business, that persons who are denied a voice in decision-making will lose interest in the process, or attempt to sabotage its workings, or try to use it for selfish reasons. Denied responsible participation, such persons become irresponsible. We cannot get democracy in that way. Whatever democratic living may turn out to be, it requires rigorous training, great skill and patience, and faith which at times “passeth all understanding.”

¹ William S. Learned and Ben D. Wood, *The Student and His Knowledge* Bulletin No. 29. New York: Carnegie Foundation for the Advancement of Teaching, 1938

DRILL, OR THRILL, IN EDUCATION?

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NOT long ago a group of university faculty members, representing a wide sampling of subject-matter fields mostly outside of education, was discussing the general problem of instructional method. In the course of the discussion a question arose whether learning should be considered a process of "drill" or "thrill." This question is of importance, first, because it is frequently asked and, second, because a proper answer involves important psychological considerations. The writer raised objection to the implications of the problem as stated, maintaining that it is not an "either-or" proposition but rather one of getting both conceptions into the picture and putting them in their proper places. Such a claim demands elucidation and elaboration; hence, this article.

After reaching a decision on *what* to teach children in school (a problem in itself), the matter of next concern is *how* to teach it. Shall concentration be placed on particular learnings and pupils be required to practice these learnings over and over until they are achieved—essentially "drill"? Or shall pupils be allowed to do virtually as they please, the hope being that they will incidentally learn at least a major part of what it is desired they shall learn—a process which may be called "thrill"? The former tactic is humorously characterized by Mr. Dooley in his well-known observation, "I don't care what ye larn thim so long as 'tis onpleasant to thim."¹ The latter tactic is suggestive of the so-called "modern" way of bringing up children—giving them a "psychological" upbringing. Whether psychologists are responsible for this point of view or have had the blame for it mistakenly placed on their shoulders will not be considered here.

¹ Finley Peter Dunne, "The Education of the Young," *Mr. Dooley at His Best*, p. 219. Edited by Elmer Ellis. New York: Charles Scribner's Sons, 1938

The quickest way to get at the heart of this question is to examine three psychological interpretations of the nature of learning: (1) learning as conditioning, (2) learning as growth, and (3) learning as developing insight.

LEARNING AS CONDITIONING

Widely prevalent among physiologists as well as psychologists—to say nothing of the lay public—is the belief that the reflex-arc concept is a basic and an essentially adequate explanation of nervous action. The nervous system is assumed to function on the basis of various combinations of reflex arcs, often called S-R (stimulus-response) bonds. A simple reflex arc, or S-R bond, is composed of a sensory end organ, a sensory nerve, a synapse, a motor nerve, and a motor organ. The term “motor organ” is here used generically; it may be muscle, gland, or whatever type of effectuating organ is involved. When a sensory nerve ending is stimulated, an impulse travels up the sensory neuron, across the synapse, down the motor neuron, and discharges into the motor organ, causing action. This circuit is a simple reflex arc.

In a human organism no neural arcs (S-R bonds) are ever simple; not even those involved in eyewink or knee jerk. Not one, but many synapses are employed; and the more complicated an act, the greater the number of neurons involved and the more complicated the connections. In any case, however, a single reflex arc is presumed to be explanatory. Complications are presumed to be due to the presence of “additional loops,” either tandem or albreast; probably both.

Action on the part of an organism thus becomes a function of stimulation by the environment, and the particular arcs which account for action are made functional by reduction of resistance at the synapses. Habit thus becomes a fixed sequence of reflexes, and a particular sequence is set off whenever appropriate stimulation is applied.

According to this view, if the term “habit” is to be used with precision, distinction should be made between instinct and habit. A particular sequence of acts which does not have to be learned but which is performed correctly the first time a given stimulation impinges upon an organism is known as an instinct. A particular se-

quence of acts which become sequential as a result of learning is known as a habit. Thus learning is a *process of forming new habits*.

How are new habits formed? Through a process typified by the concept which goes under the name "conditioning." Conditioning is presumed to be fundamentally a process of reducing synaptic resistances and thus establishing certain preferred paths of nervous discharge. According to a strict, and probably the only consistent, application of the concept of conditioning, synaptic resistance decreases or increases according to the laws of use and disuse. Use strengthens a bond by decreasing synaptic resistance; disuse weakens a bond by increasing synaptic resistance.¹

According to the interpretation of learning as conditioning, teaching technique becomes a matter of causing stimulus and response to occur together a sufficient number of times to reduce synaptic resistance to the level demanded for facile action. A process of *drill* is thus indicated, the nature of which is primarily repetition of a given sequence of acts. Accordingly, spelling is a matter of repeatedly pronouncing a word and then spelling it, orally or in writing, a sufficient number of times to *stamp it in*. This process is repetitive drill, in which it is important that each subsequent sequence of acts be a repetition of previous sequences. Otherwise, either learning does not occur, or the theory breaks down.

One may complicate the matter somewhat by introducing the law of effect and considering that repetition with satisfaction "stamps in" a bond and repetition with annoyance "stamps it out." The law of effect thus leads to the teaching principle, "Practice with satisfaction, let annoyance attend the wrong." In other words, it would be well to have a child as happy as possible during learning, since happiness would promote satisfaction with each repetition and thereby make learning more rapid. However, the major tactic of conditioning is not essentially altered by introduction of the law of effect.² Conditioning is still a process of repetition, in which the similarities among repeated acts are paramount and the stamping-in process is the matter of major concern.

¹ For the moment the law of effect is, intentionally, left out of the reckoning.

² Unless, indeed, as is often the case, a basically different psychological theory—the goal-insight theory—is unconsciously and unknowingly adopted.

LEARNING AS GROWTH

The concept of learning as growth need not be dwelt on at great length because neither its basic psychology nor the pedagogy which it implies has been carefully thought out. By its very nature, the concept is vague. Growth is thought to be any change in the nervous system or in the activities which are performed by the nervous system, regardless of the consequences which they imply or the direction in which they lead. The fact is that, when the psychological implications of the concept have been thought out at all, dependence has usually been placed on the Thorndike law of effect and its pedagogical corollary, "Practice with satisfaction, let annoyance attend the wrong." According to this view, the matter of major importance is that satisfaction be achieved in the classroom regardless of what is studied or learned. Thus what is studied does not make much difference as long as it gives satisfaction or is interesting; Mr. Dooley's maxim may be changed to read, "I don't care what ye larn thim so long as 'tis pleasant to thim." From time to time, naturally, the question of what activities are desirable and what habits should be established rears its head to plague the believer in learning as growth, but such individuals usually develop a competent technique for dismissing that question from mind and thus avoiding difficulty.

Newness of activity, persistent and continued variation in what is studied and in the pupil's activities from day to day and week to week, creativity, each pupil different from every other pupil, every day different from every other day, education for a changing world—all these, and more, are catch phrases used by those most enamored of the view of learning as growth. Here is education as thrill, with a vengeance. This view is virtually the antithesis of the principle of learning as conditioning and education as drill.

Education as drill—barren repetition—with whatever thought that is given to interest or thrill merely incidental or accessory, implies, to the writer's mind, an utterly unthinkable pedagogy. Education as thrill, with its consequent failure to come to grips with the necessities of careful, logical thought, with its Pollyanna-like attitude toward life, and with its implication of completely individualistic laissez-faireism, is likewise, to the writer, unthinkable. Rous-

seau suggested something akin to this latter view in his epoch-making educational work, the five-volume *Emile*. Return to nature; let the child learn for himself; never permit him to be subjected to direct instruction either by book or by tutor—such were the precepts which Pestalozzi and, to some extent, Froebel attempted at first to follow but which they soon discovered to be completely impracticable. Thrill, as a means in itself, seems not only silly but highly miseducative.

LEARNING AS DEVELOPING INSIGHT

The concept of learning as growth has long been justified on the basis of the phrase, "We learn to do by doing." Stated in this manner, the phrase is easily taken to mean that, as long as a pupil is doing things (actively moving about rather than sitting quietly), he will be learning. So interpreted, it has been used to justify so-called "activity" schools and school programs, many of which have had little to justify them other than mere activity.

The phrase is credited to John Dewey, perhaps because the Dewey School at the University of Chicago was one of the first in this country to introduce movable chairs into the classroom and thereby enable pupils to move about when occasion demands. Careful study of Dewey's writings, however, will show conclusively, the writer believes, that, if Dewey ever stated the phrase as quoted, he did not mean that doing is synonymous with learning nor even that doing is always necessary for learning. He explains that mere doing is insignificant in itself, that it promotes learning only when the doing "is continued *into* the undergoing"; that is, when the doing is comprehended by the doer as leading to something which must be undergone as a consequence. A child does not learn, he says, merely by sticking his finger into a candle flame; the child learns only as he senses that the candle flame *means* a burn.¹

Thus, for a good many years a gradually increasing number of educators and psychologists have been coming to believe that neither drill nor thrill can be the be-all or the end-all of teaching procedure. In the first place, there has been a growing realization that learning proceeds best and most effectually in happy surroundings, particu-

¹ John Dewey, *Democracy and Education*, p. 163. New York: Macmillan Co., 1916.

larly when a learner has definitely in mind an objective and is vitally concerned with achieving it. In the second place, there has come the realization that repetition is not the crucial feature of learning. In fact, even Thorndike concludes, as the result of very clever experimentation, that sheer repetition has little, if any, effect on learning.¹

Experimental studies of the learning process have given repeated evidence also that learning is not a gradual process, as would be implied by the concept of lowering synaptic resistances. It is characterized, rather, by sudden jumps or spurts, which are followed often by plateaus. James calls them "flyings" and "perchings." Rats which had been obtaining food in a roundabout manner dropped the roundabout path with suddenness and completeness when a direct path was discovered.² Two groups of dogs, one seeing and the other blind, were taught to get food at a given door in a box, and then the box was rotated counter-clockwise, first by 90 degrees, second by 180 degrees, and third by 270 degrees. After each of the first two rotations both groups went to their right and around to the food door in the direction of rotation. After the 270-degree rotation (three-fourths of the way around), the seeing dogs almost at once went to the left (the shorter way), whereas the blind dogs continued to the right (the long way around), evidently because they could not see the shorter way.³ The experimental work of Lashley on the relation of reflex arcs to the retention of habits has been extremely enlightening and highly damaging to any reasonably strict interpretation of reflex arcs (S-R bonds).⁴

Moreover, if one examines a habit carefully and minutely, one discovers that by hardly any stretch of the imagination can it be characterized as a strict sequence of acts. Rather, close examination each time an act is repeated shows the particular sequence or combination of sequences to be different from anything that has oc-

¹ Edward L. Thorndike, *Human Learning*, pp. 3-15. New York: Century Co., 1931

² Zang Yang Kuo, "The Nature of Unsuccessful Acts and Their Order of Elimination in Animal Learning," *Journal of Comparative Psychology*, II (February, 1922), 1-27

³ Reported in Raymond Horder Wheeler and Francis Theodore Perkins, *Principles of Mental Development*, pp. 96-98. New York: Thomas Y. Crowell Co., 1932

⁴ K. S. Lashley, *Brain Mechanisms and Intelligence*. Chicago: University of Chicago Press, 1929

curred before. A strict sequence of acts may be characteristic of a mechanical toy which, after being wound, performs its antics until it runs down, but no human child, youth, or adult appears to act in that way.

A living human organism acting on the habit level appears, first, to sense more or less clearly a given outcome or goal which he desires to achieve; second, to sense the existence of an environment, some features of which will help, and some hinder, his achievement of the goal; third, to sense relations between environmental objects as means or obstacles and the goal as an end; and, fourth, to act in such a manner as to achieve the goal in the way that he senses as the quickest and the easiest possible under the circumstances. Therefore, from this point of view, if one would predict the behavior of a given individual at a given time, one must know (1) what he wants to achieve, (2) what environment he will face, and (3) what insights or abilities he possesses. Given *only* a certain environmental stimulus, one is not in a position to say what a given individual will do when that stimulus impinges on his nervous system. One must know also what goal the individual wants to achieve and what usable relationships he comprehends.

What will a child do with a brightly polished apple when it is handed to him? It would be patently inaccurate for anyone to say unqualifiedly that the child will eat it. The child might not even know that an apple is something edible; he may have had experience shortly before with a wax apple and be dubious of the edibility of this one; or he may not be hungry but may be in a playful mood and therefore moved to throw the apple at the person handing it to him. A host of responses is possible, and at a particular time the *most appropriate* response is likely to occur, not the response which previously has been most often practiced. Goal, environment, insight—all three must be known and properly interrelated before prediction is possible.

As to learning, it is evident that, with a given goal and a given environment, action is dependent on insight. Altered insight means altered comprehension of the way in which a goal is to be achieved and, therefore, an altered sequence of acts in achieving it. Learning thus becomes a process of *coming to sense a new set of relation-*

ships—developing new insight. The doing assists only in affording opportunities either to discover or to try out a new insight. If a new insight flashes on one without the doing and if it is evident without trial that the insight will be adequate when needed, then indeed learning is achieved without doing. The adage, instead of reading, "We learn to do by doing," had better read, "We learn to do by seeing."

How will the view of learning as developing insight affect the process of teaching? Let us apply it to spelling. Instead of having pupils learn interminable lists of words virtually by rote, each word being learned by itself in a repelitive manner, the teacher should present each new word to a pupil with the question (either stated or implied), "How does this word *have* to be spelled?" Sooner or later the pupil will grasp the idea that each sound is represented by one or more letters or combinations of letters, and, as soon as he masters phonetic (sound-letter) relationships, he will know how to spell. Teachers must seek to develop a "spelling sense" rather than to have children learn to spell words in isolation.

Three of the writer's own sons, upon reaching Grade III, have had to be put straight in spelling by home instruction simply because they had not grasped the basic sense of spelling. They had been taught words in isolation; they had not been brought to see spelling as a relational process. In each case three weeks or so of special attention at home, with concentration on the question, "How does the word *have* to be spelled?" were sufficient to straighten out their difficulties. No opportunity was given to memorize words before the attempts to spell them were made; a new word never spelled before was taken each time. The child was first asked to spell the word logically ("the way it sounds"). Afterwards, if the actual spelling of the word was exceptional, that fact was noted, the exception was explained insofar as possible, and the spelling of the word was then memorized as an exceptional case. In this way rote learning was reduced to a minimum, rather than being used for all words.

It is often claimed that the English language is not spelled phonetically. Such a statement is a gross exaggeration. If you will make a count of running letters in a paragraph of ordinary English, you may be surprised to find that not more than 10-12 per cent of

the letters so counted are nonphonetic. Moreover, many exceptions go by rule, for example, the syllable pronounced "shun" usually is spelled *l-i-o-n*. Spelling possesses a logic, and it is unjust to children not to help them take advantage of the logic in learning to spell.

Lack of space precludes the presentation of more examples, but the basic tactic of teaching which this view implies is *doing for the purpose of discovering relationships* rather than doing for the purpose of stamping in bonds—doing and seeing rather than mere doing. The seeing (understanding) is the more important factor; the doing is subsidiary to the seeing and is of value in the degree to which it promotes seeing. This is the meaning of the concept of learning as a process of *developing insight*.

Is no drill involved in such a concept of learning? Clearly a great deal of work, effort, and doing are involved, and doubtless considerable "repetition." The repetition is, however, repetition with a difference rather than repetition of acts which are always the same. Each repetition serves to furnish an added opportunity for making discoveries. Each subsequent set of acts needs to be modified in the light of experience gained or insights gathered; therefore each is different from previous sets of acts and is educative because of the differences. This process is not humdrum, rote, repetitive drill, as implied by the concept of learning as conditioning. Learning as developing insight involves thrill by virtue of the fact that each learning is a process of discovery; and discovery, when discovery is desired, is always thrilling.

Hence the conclusion is that either concept of education—drill alone or thrill alone—is a one-sided and an inadequate view. The concept becomes properly formed and adequate only when both drill and thrill are brought into the picture, when they supplement each other and thereby promote the establishment of learning situations which are both enjoyable and effectual.

THE PRE-READING PROGRAM OF THE CHICAGO PUBLIC SCHOOLS

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THE Chicago public schools have inaugurated a program of pre-reading activities which is adaptable to the many communities of the city. A tabulation of the reading readiness of children entering Grade I of the Chicago public schools in September, 1938, showed that 16.3 per cent of the children were definitely not ready to read and that an additional 12.8 per cent were probably not ready. The number of pupils definitely not ready to read in the eight elementary districts ranged from 6.7 per cent to 23 per cent of all those who entered Grade I. Such figures indicate that every school must determine the needs of its entering pupils and organize pre-reading activities to provide for these needs.

The superintendent of schools appointed a committee of principals and supervisors to determine the best approach to the teaching of reading and to recommend procedures for use in the school system. The report of this Pre-reading Committee contains a list of five factors which the committee found influenced a child's readiness to read. It also provides a suggestive list of teaching devices for the development of these factors.

Success in the acquisition of reading skill is dependent on a number of factors which, though related, are nevertheless quite distinct. Reading is a complex process, and a lack of any one of the necessary factors may result in failure to learn to read. It has been proved that children do not develop all these factors to an identical degree at a given chronological age. Undesirable results may follow when children who have not reached the necessary levels of mental, emotional, and social growth are introduced to formal reading instruction. Teaching effort is expended needlessly, and some pupils suffer the unhappiness of failure before they are given a fair chance to

experience success. They may develop a mental set against reading, which tends to increase rather than diminish as they continue through school. The poor reading habits of retarded pupils have sometimes been traced to their reading difficulties in the primary grades. These pupils often have not really mastered the simple words in the ordinary primary vocabulary and consequently cannot make normal progress in either speed or comprehension. Hence their retardation increases with the difficulty of the reading material.

The superintendent's Pre-reading Committee listed the factors which influenced reading readiness under five headings: (1) physical, (2) psychological, (3) emotional, (4) social, and (5) language. Desirable levels of development in each of these factors were indicated in the report as guides to teachers in determining whether pupils are ready to begin reading.

General health and stamina are necessary *physical* characteristics. It is also important that children be carefully tested for visual, auditory, and speech defects. Even experienced teachers recall instances in which a physical defect, such as poor eyesight or impaired hearing, was discovered only after a child had become conspicuous by his failure to make normal progress in Grade I. That a child's physical condition has a direct influence on his emotional and mental reactions is an undisputed fact which must not be overlooked by teachers when they consider the four other factors conditioning reading readiness.

Mental maturity is the most important *psychological* factor to be considered. Mental maturity implies the ability to make discriminations, comparisons, and associations. The administration of the Metropolitan Reading Readiness Test and the Kuhlmann-Anderson Intelligence Tests is recommended for obtaining an estimate of the mental abilities of children entering Grade I. In addition to the general score, a pupil's performance in each part of the test can be studied to determine which abilities need further development. For instance, a child who has an unusually short memory span will be unable to remember the printed forms of words in spite of the fact that his other mental faculties are developed to the level where he may successfully learn to read. For this child emphasis must be

placed on the improvement of memory. If a pupil cannot pick out similar figures from a group of pictures, he will not be able to match letters and words, and his ability to compare and discriminate must be strengthened. The score obtained from the Kuhlmann-Anderson test will also give the child's intelligence quotient and an estimate of the rate of learning at which the pupil can be expected to progress. Writers on the subject agree that a pupil must have attained a mental age of at least six years, regardless of chronological age, in order to learn to read.

A *wide background* of rich and varied experiences is part of the essential mental equipment of every child who is to be taught to read. The words in the average speaking and reading vocabulary of primary children must hold real meaning for each child. The lack of adequate word concepts leads to confusion in learning the printed symbols. A city child, for instance, who has seen neither a cow nor a crow and has not happened upon good pictures of them would not have adequate mental concepts to help him distinguish these words, which look much alike.

Confidence is a desirable *emotional* factor for the child to possess. Timidity, self-consciousness, or fear are factors which interfere with the close concentration necessary for successful learning. First-grade children must apply themselves wholeheartedly to the reading process in order to acquire skill. Teachers and parents should help children to acquire poise and to develop pertinacity and pride in accomplishment. Situations and activities which give children opportunities for small and frequent successes are of great value in building up a comfortable feeling of self-assurance. The child who attacks his problems expecting to succeed will think and act naturally and freely. The child who lacks confidence or who fears that he will not do his work correctly is handicapped before he begins.

There are several *social* factors which influence a child's adjustment to his school environment. For some young pupils the experience of working with other children is new. They must learn to live with others in the schoolroom, to contribute to the class work, and to share in the pleasures and the responsibilities of the entire group before the intricate reading process is introduced to them.

The *language* factor presents difficulties which vary with the

home backgrounds of the pupils. In as large a city as Chicago definite language problems are encountered in those neighborhoods which are predominately foreign. The children are handicapped by an inadequate English vocabulary. They are often troubled by inaccuracies of pronunciation and enunciation, and foreign idioms and colloquialisms confuse the children when they try to express themselves. Occasionally the pupils show an inadequacy of language development because of a lack of sufficiently varied experiences.

The Pre-reading Committee studied modern teaching techniques in order to select those best suited for maintaining a proper relation between the general all-round development of the child and the acquisition of reading skill. In the past the physical, the mental, the emotional, and the social characteristics of children were sometimes overshadowed by dominant emphasis on the teaching of reading, especially in Grade I. In Chicago each of these five factors is now considered before children are placed in reading groups. The four general groupings suggested by the committee are: (1) children ready for reading, (2) children probably ready, (3) children probably not ready, and (4) children definitely not ready.

Pupils in the last three groups are given many opportunities in the classroom to develop adequate levels of mental, emotional, and social growth. The development of language through vocabulary enrichment is also given special attention. Pre-reading activities for these classes have been organized into a definite program to attain the following objectives:

1. Enrichment of experiences
2. Development of language concepts through—
 - a) Activities and projects
 - b) Juvenile literature (in the hands of the teacher)
 - c) Songs
 - d) Interpretation of pictures
3. Development of number, spatial, and time concepts
4. Development of habits of—
 - a) Attention
 - b) Following directions
 - c) Left-to-right and top-to-bottom progression
 - d) Recognition of similarities and differences
5. Enlargement of memory span

6. Development of realization that books are a source of fun or information, thus inducing a desire to read
7. Development of ability in problem-solving

The teachers in the Chicago elementary schools now plan many actual experiences for children in the pre-reading groups. They arrange for excursions outside the school to neighborhood shops, parks, or other local activities of interest, such as a building under construction. Tours within the school building are also arranged. Visits to the library, the school office, or the boiler-room and talks with the school doctor, the milkman, and the mail-carrier help children adjust themselves to the school environment. These activities provide a wide range of knowledge for every child in the class. They stimulate many group discussions and further class activities.

Through such a program children learn to handle a variety of materials. They are encouraged to draw, paint, model, weave and to use the sand table and blocks. Play activities are also part of the program. An enlarged vocabulary is only one of the important outcomes of dramatizations and play periods. As the children play store, pilot airplanes, and ride in street cars of their own manufacture, they are imitating the activities of their neighborhoods and homes. In this way school becomes associated with real life. Informally the pupils learn such skills as counting and color identification. Sensory, rhythmic, and singing games stimulate mental alertness and, at the same time, increase the children's manipulative skill.

Most of these activities are planned to expand and to improve the pupils' use of language. Likewise, conversational ability is developed by using toy telephones and microphones and by discussing pets, toys, and pictures. The teachers strive to improve enunciation and to develop a feeling for the initial and the ending sounds of words. Rhyming games are often used to teach the little boys and girls to listen to the sounds of words. Many pupils need help in developing concepts of such words as "under," "over," "on," "up," and "down." They also need guidance in developing concepts of qualifying words, like "hard," "slowly," "round," "small," and "quietly." Informal games are used to teach children how to use

the proper tenses of verbs and how to form plurals correctly. In fact, before they begin to read, the pupils have overcome their glaring language deficiencies and are able to express themselves.

Training is given for the improvement of the visual, auditory, and kinaesthetic senses to those children who are unable to observe carefully or to listen attentively. For example, the children close their eyes, then count the number of times a pupil leader bounces a large ball. The child who can tell the correct number of bounces becomes the next leader. Motor co-ordination is improved by games which require marching, skipping, and skating. Such a program of group projects and games is distinctly advantageous to those children who are not physically dexterous. Awkwardness is often as embarrassing to children as it is to adults. A child who cannot go up and down stairs, is unable to use scissors, or is baffled by the snaps and the buttons on his own jacket is conspicuous and unhappy. Games and activities which offer opportunities for the improvement of muscular co-ordination help to avoid emotional maladjustment.

As a means of stimulating curiosity, riddles, unfinished stories, and many science activities are presented to the children in pre-reading classes. The teacher further aims to give practice in assimilating details and in anticipating solutions. An entire class may work together to prepare a weather chart or tabulate the lengthening of the day and the shortening of the shadows in the spring. In such group work the pupils pool their ideas and plans, and these discussions stimulate thinking.

Four types of pre-reading activities are planned to develop the pupils' ability to reason or to think. Their skill in problem-solving is improved by participating in projects, assembly programs, and room parties. Recognition of similarities and differences necessitates both mental and visual competence. Matching games, using colors, pictures, geometric figures, and words, help the pupils develop these faculties. "Touch game" is a simple teaching device which has been found helpful in training children to remember items in sequence. One pupil touches an article in the room, a second child touches that object and one other, the third child must touch both the first and the second objects before he touches one of his own choice, and so on. Gradually the ability of the children to re-

member in sequence is increased, and more pupils are added to the game.

Children in pre-reading classes learn to retell the details of stories in the proper sequence. After class tours or excursions the teacher assists them to recount their own experiences in a systematic fashion. Simple classifications help children to develop orderly habits of thinking. They like to make scrapbooks, word-picture dictionaries, and charts of foods, pets, animals, or clothing.

The pre-reading classes provide excellent opportunities for young children to form good work habits. They are not under the strain of trying to assimilate reading material and consequently are not tempted to take unfortunate short cuts to knowledge or approval by copying from others, as was formerly the case when all children were exposed to reading regardless of their readiness to profit from instruction. Teachers of pre-reading classes give the children plenty of practice in following verbal directions of one, two, or even three steps. So many group activities are planned that every child has many opportunities to serve on committees and also several chances to be a leader or a committee chairman. The pupils learn to co-operate with one another and begin to acquire habits of self-reliance, dependability, and courtesy. The pre-reading activities also tend to improve the children's ability to concentrate and to complete whatever work they have undertaken. Because the pupils are doing work and playing games suited to their own levels, they are usually successful and can take pride in their accomplishments. Then, too, it is easier for the children to maintain standards of neatness in personal habits and in class work when the schoolroom activities have been carefully adjusted to their abilities.

To develop simple number abilities is another objective of the pre-reading groups. Blocks are sometimes used to make geometric figures so that children learn to recognize the most common forms. Every natural occasion for counting is utilized, such as counting desks, boys, girls, windows, blocks, or books. Games like "Ten Little Indians," "Five Little Chick-a-dees," and "Seven Hops" give additional practice in number use. The recognition of written numbers motivates the following game: Ten children stand before the class, each holding a card numbered from one to ten. One pupil

bounces a ball, and the child who holds the card representing the correct number of bounces steps forward and says, "You bounced the ball —— times."

Since good health is vitally important to all pupils, teachers of pre-reading classes base many group activities on health education. Food charts, scrapbooks, and dramatizations are typical of this emphasis on good health habits.

All these activities offer opportunities for the social growth of the pupils. Perhaps the one character trait which these beginners lack more than any other when they come to school is ability to take responsibility. Frequent occasions arise in the pre-reading classes to emphasize this personal quality. The children learn to recognize their names on hooks in the dressing-room, take charge of arranging the room furniture, care for pets and plants, and welcome visitors. Independence of action is attained as each child learns how to manage himself in the ordinary activities of his group.

An interest in school and a desire to read are natural outcomes of these varied activities. Free access to picture-books is provided in each room by arranging a library corner provided with suitable books. The school library is visited frequently so that the children become acquainted with many attractive books. Reading activities are also stimulated by room bulletin boards where weather charts or news sentences dictated by the children are printed and posted by the teacher. Labels are attached to articles which the children bring for their group projects, such as baskets, dolls, and flags, as well as to other objects in the room. Action games in which reading situations occur are often used. Teachers of these groups frequently read aloud to the children or tell stories while they show the pictures in the story-books to the class. This plan is perhaps the most effective method to imbue the children with a love for reading and an appreciation of books.

Thus, at the conclusion of the pre-reading activities the children are not only physically, mentally, emotionally, and socially better able to begin formal reading, but they are eager to read and anticipate their new lessons with pleasure. They have been adequately prepared to insure a measure of success in their subsequent school life.

A CUMULATIVE-RECORD FORM FOR THE ELEMENTARY SCHOOL

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THE keeping of a comprehensive individual cumulative record of growth in aptitude, achievement, and personality, as contrasted with the traditional permanent record of subjects, grades, and credits alone, has long been a practice of certain experimental and laboratory schools. However, it is only during the past decade that the idea of the modern type of cumulative record has influenced the thinking and the practice of any significant proportion of schools throughout the country. The growth of interest in cumulative records dates from the publication in June, 1928, of the report of the American Council on Education's Committee on Personnel Methods,¹ of which Dean Herbert E. Hawkes was chairman. The report, prepared for the committee by Professors Ben D. Wood, of Columbia University, and E. L. Clark, of Northwestern University, presented the record form which has since come to be known as the American Council Cumulative Record Folder, set forth the basic philosophy of that type of recording, and gave concrete illustrations of the use of the form.

In the years since 1928 the American Council on Education has published four cumulative-record forms: a cumulative-record folder for college students, a cumulative-record folder for secondary-school pupils, a briefer cumulative-record card for either the elementary school or the secondary school, and a record card designed especially for the elementary school.² Approximately 350,000 of the cumulative-record forms published by the American Council have been distributed. In addition, there have been many adaptations of

¹ "Personnel Methods," *Educational Record*, Supplement No. 8, IX (July, 1928).

² The last-named card resulted from the work of Anna Rose Hawkes and Margaret Moore.

the original American Council form by various school systems and professional organizations. The best known of these adaptations probably is the Educational Records Bureau Cumulative Record Card for Independent Elementary and Secondary Schools prepared in 1933 by Winston B. Stephens and Eleanor Perry Wood.

The major features of the American Council folder and its adaptations are the allowance of ample space for a record of objective-test data, including a graph in terms of percentiles, and the provision for an extensive record pertaining to home influences and co-operation, mental and emotional factors, extra-curriculum activities and interests, notable accomplishments and experiences, educational plans, and personality ratings. The introduction of these features into the record systems of many institutions may be traced directly or indirectly to the influence of the American Council forms.

The main purpose of this type of cumulative-record form is to promote an understanding of the individual pupil. When it is remembered that the personnel records which a school keeps not only reflect its philosophy of education but that they, in turn, help to create both a philosophy and a science of education, it is evident that the cumulative record has become a dynamic force in the individualization of the work of American schools and colleges.

Thus far in the history of cumulative records, the main emphasis has been on the values of records of this type for the guidance of pupils while they are still in the school which is maintaining the records. These are probably their most important values, but potentially they have another significant use which could as well receive greater emphasis, namely, use for transfer and admission purposes.

Much has been said and written in recent years about the difficulties which secondary schools encounter in providing colleges with adequate information about their graduates. The problem of the transfer of pupils from the elementary school to the secondary school is, in some respects, more acute than that of the transfer of students from the secondary school to the college because of the greater number of pupils involved at the lower level. In addition, the multiplicity of admission forms has sometimes made it difficult for elementary schools to provide secondary schools with the desired

information about individual pupils. In some ways private schools have been more keenly aware of the difficulties than have public schools because of the fact that private-school pupils usually transfer to an entirely different school when they are graduated from the elementary school, whereas most public-school pupils remain in the same school system at least throughout their elementary- and secondary-school experience.

The member schools of both the Educational Records Bureau and the Secondary Education Board have long been concerned with the problem of simplifying and improving the reports which the elementary schools make to the secondary schools. With a view to assisting in the solution of the problem, in 1936 Charles B. Weld, of the Taft School, chairman of the bureau's Committee on Relations between Elementary and Secondary Schools, appointed a subcommittee, consisting of Thomas K. Fisher, of St. Paul's School, and Hart Fessenden, of the Fessenden School, to explore the field and, if possible, to devise an admission form that secondary schools generally might be willing to accept.

The subcommittee, in co-operation with C. Thurston Chase, Jr., of the Eaglebrook School, and with a member of the Educational Records Bureau staff, decided that the needs of the schools could best be met by constructing a form which would serve both as a cumulative-record card for the elementary school and as an admissions record for the secondary school. The subcommittee first collected and tabulated the items appearing on the admissions forms of about sixty secondary schools. This step served to show the kinds of information which secondary schools were interested in obtaining from the elementary schools.

The next step was the preparation of a cumulative-record form for the elementary school which would include these items and would also provide the information that the elementary school itself needed for guidance purposes. It had been found that secondary schools are ordinarily interested in data for only the last four years of the elementary school. Since it was desirable to allow as much space as possible for each year, the new record form was constructed to provide only for a four-year cumulative record. It was felt that if an elementary school wished to use this form in the first

four grades as well as in the last four, two cards could readily be prepared for each pupil.

Several of the major ideas of the American Council Cumulative Record Folder were embodied in the new form. Among these were the following: (1) the organization of the data throughout the card by years; (2) provision for a cumulative record with respect to abilities, personality, health, and home influences; and (3) extensive space for an organized tabular report of test scores. The gridiron for keeping a cumulative graphic record of test percentiles and school marks, which is such an important aspect of the American Council forms, was not included in the main record card, but a separate form was made up for this feature of the record. It was felt that the preparation of a separate card for the graph was a sound procedure in view of the fact that many schools do not use the graph even when it is a part of the main record form and the further fact that the inclusion of the graph on the card with the other items would have resulted in the crowding of several sections. However, it is believed that, for schools which have learned to interpret them properly, graphs are one of the most useful features of the cumulative record, although the detailed scores given in the table should not be ignored.

The new record form was presented for criticism at a joint meeting of the Committee on Relations between Elementary and Secondary Schools and the Independent Schools Advisory Committee of the Educational Records Bureau held in New York City in October, 1938, under the chairmanship of Robert N. Hilbert, of the Hill School. The new form was also presented at various group conferences of the Secondary Education Board. On the basis of suggestions made in these meetings and in subsequent individual conferences with representatives of different schools, the form was revised and reprinted. It was approved on a trial basis by both the Independent Schools Advisory Committee of the Educational Records Bureau and the Executive Committee of the Secondary Education Board.

The size of the new form—both the main record and the graph card—is nine by eleven and a half inches, which is suitable for the ordinary letter-size file. The form is printed on opaque paper sheets as well as on cards. Since the paper sheets may readily be folded,

they are somewhat better adapted for use in sending transcripts to other schools than are the cards. It is presumed that some elementary schools will keep the original cumulative-record forms in their files and will make copies on the paper sheets to send to secondary schools.

For the purpose of providing detailed information concerning the new record form, a sample record is presented in Figures 1, 2, and 3. An actual record of a pupil who was recently graduated from an independent elementary school has been used for illustrative purposes.¹ The names of persons and schools appearing on the record are fictitious.

It will be noted that the card begins with a number of items concerning the social history of the pupil, which are followed by a rather detailed record of the pupil's participation in activities. Eight types of activities are printed on the card, and spaces are left for writing in other activities. In the record of general health, special attention is given to vision, hearing, and limitations. Below the health record, provision is made for a summary of home influences each year.

All the personality traits listed appear frequently on cumulative-record cards and admission forms of various institutions. It is anticipated that most schools will fill out this part of the card simply by using ordinary expressive words, as "excellent," "good," "fair," and "poor," although a numerical or letter rating plan can be employed if desired.

It is expected that a general summary statement concerning the pupil will be entered in the space designated as "Comments at Time of Transfer." An unusual feature of this record form is that space has been reserved in the lower right-hand corner for notes by the secondary school to which the form is sent as a transcript.

The placing of the data concerning the school activities, health, home influences, and personality of the pupil on the first page of the card, the back of the card being reserved for the record of scholar-

¹ It is evident, of course, that since the use of this record form has just begun, the record shown here was not kept while the pupil was in school. Rather, it was compiled from data in the school's file after the pupil had been graduated. Certain portions of the record can be filled out in greater detail when the form is used as a cumulative record.

[illegible]

STANDARD ACHIEVEMENT TESTS
 (Check if branch attached)

SUBJECT	GRADE 1		GRADE 2		GRADE 3		GRADE 4		GRADE 5		GRADE 6		GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		COMMENTS
	CA	MA	CA	MA	CA	MA	CA	MA	CA	MA	CA	MA	CA	MA	CA	MA	CA	MA	CA	MA	CA	MA			
ARITHMETIC	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
ALGEBRA																									
GEOMETRY																									
SCIENCE																									
ENGLISH																									
HISTORY																									
PHYSICS																									
CHEMISTRY																									
TEACHER'S RECORD																									

NOTE: 62.5% minimum required grade, 61%
 SUBJECTS ARE DESIGNATED IN S.E.28 REFERENCE

1. Please attach TEST RESULTS, TO NAME, ADDRESS, SCHOOLSHIP
 Cumulative Record Card for Individual Elementary School and Admission Form for Secondary Schools
 Educational Record Bureau, 401 West 20th Street, New York N. Y.

Fig. 2.—Reverse of cumulative-record card

ship and achievement, is in keeping with the modern tendency for schools to be concerned with many aspects of the development of the pupil rather than with academic work alone.

In the table for subjects, marks, and credits on the reverse side of the card, there are under each year columns for three marking periods, a mark for the year, rank in class, and time in terms of periods per week that the subject was studied. There is space for marking a pupil in two or three aspects of English if desired. Flexibility in marking in connection with all the other subjects, except music and art, is provided for through the allowance of an extra line. Schools having correlated courses will also find the extra spaces useful for writing in the names of the courses. The appearance of French and Latin throughout the four years is explained by the fact that some independent schools start these subjects fairly early in the elementary grades. The lines throughout the card are spaced for the typewriter.

In the graph form which appears on the second card, the general form of the graph of the American Council Cumulative Record Folder is followed. The graph is based on an assumption of normal distribution of ability, and the percentiles are, therefore, much closer together near the median than near the extremes. The fiftieth percentile is designated by a heavy line. The abbreviations at the top of the graph indicate the months of the year. Notes may be entered below the graph as well as on the reverse side of the card. Since the back of the graph card has been left blank, the local school may, if it so desires, have a form printed on that side for any additional data that it wishes to preserve in the pupil's permanent record.

The first page of the three-year cumulative record for Robert Dunlap Pierce, Jr., shows that the pupil came from a good American home, entered the school in January, 1936, with a good record in the school previously attended, was regular in attendance, participated in a variety of activities, had normal health, and possessed desirable personality characteristics.

The second page shows that this pupil was consistently near the top of his class in scholarship as indicated by school marks, that he was high in intelligence, and that he was superior in achievement as measured by the New Stanford and Metropolitan tests. The

graphic record shows at a glance that all independent-school percentiles corresponding to the boy's achievement-test scores were well above the median, or fiftieth percentile, and that some of them were decidedly high. For example, the percentile rating for the score on the English part of the Metropolitan test in March, 1938, was 99. In other words, the pupil's score on this part of the test was exceeded by only 1 per cent of the scores of the independent-school eighth-grade group. The line connecting the English percentiles for the three years indicates that this pupil grew in English achievement more rapidly than does the average independent-school pupil. In total achievement the boy was in the highest tenth of the independent-school group of corresponding grade level throughout the three-year period, and he was in the upper third of his class in scores in all subjects.

The headmaster's comment, "A thoroughly good citizen and a boy of promise," is a conservative but an accurate summary of the general impression one gains from a study of the cumulative record. It would be surprising if any secondary school, however selective, should refuse admission to a boy whose record in the last three years of the elementary school was as favorable as this one. In any event, it seems apparent that this three-year cumulative record provides the secondary school with a far better basis for appraisal, placement, and guidance than would be furnished by the usual transcript filled out at the time of transfer.

In conclusion, the experimental nature of the new card should be emphasized. The committee that constructed the card and the schools co-operating in using it are convinced that the idea of a cumulative record which may be used for transfer purposes is sound, but it is recognized that some of the individual items making up the record may need revision after a period of trial. The entire form will be reviewed by committee action in the autumn of 1940. In the meantime the anticipation is that wide experimentation with the new form and with local adaptations of it will provide the committee with information which will indicate clearly the nature and the extent of needed changes.

THE CLASSROOM TEACHER AND JUVENILE DELINQUENCY

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WHEN the term "juvenile delinquency" is used, the thoughts of the hearer or the reader too often turn to youths in the hands of the courts or in special schools or other institutions for dealing with young persons who have committed wrongs of such proportions as to make them menaces to society. Thus attention has been centered more largely on treatment than on prevention. Treatment is necessary, but prevention is both more economical and more effective. The foundations of delinquency are often laid early in life through the gradual development of attitudes opposed to accepted social practice. Attitudes, good or bad, are acquired through experiences at home, on the street, in school, or wherever the child may be. Casual remarks by parents or friends, association with delinquents, dislike for school, a feeling of mistreatment in the home, or other experiences which create a sense of injustice may give the start which results in delinquency. Often the incident may be of relatively small importance in the mind of the adult. The following example illustrates one type of adult activity which may build up wrong attitudes in children.

At a time when the schools were conducting a campaign for the prevention of vandalism at Halloween, the following statement was printed on the front cover of a community paper.

DO YOU REMEMBER?

Do you remember a time when HALLOWEEN was a big occasion to us? How the gang of kids in your neighborhood were busy for weeks before the festive day—plotting depredations and devising various instruments of torture? Do you remember whittling notches in a spool to make a "tick-tack," with which you would later frighten poor old Mrs. Jones nearly out of her wits when you held it against her parlor window and pulled the string? And do you remember the

expeditions (in dead of night) into neighboring farms and gardens to gather cabbage stalks and turnips and other missiles with which to bombard the doors of irritable neighbors? And the stolen pumpkins which were carefully reamed out and transformed into ugly faces? And the plans for removing so-and-so's front gate and Farmer Brown's spring wagon?

Well, if you can't remember . . . you've never been a boy. HALLOWEEN . . . There was a Holiday!

At the same time the businessmen's association in the same district wrote to the schools:

TO SCHOOL PRINCIPALS AND POLICE CAPTAINS

We the undersigned businessmen and taxpayers of this vicinity respectfully ask your co-operation in putting a stop to the promiscuous waxing and soaping of our windows, a month previous to Halloween and a month subsequent.

We feel sure that we can depend upon you to assist us in the matter, and thank you in advance for your kind co-operation.

The businessmen and the newspaper publisher did not realize that the statement printed on the cover of the paper was operating to destroy what their letter was seeking to build up. The effect of the suggestions for Halloween pranks was to influence the youth toward activities which were considered objectionable by the community. Punishment or censure for these acts could easily be a start toward delinquency.

It is the business of the school to correct the attitudes which may lead to wrongdoing and to build up other desirable attitudes. The classroom teacher can do effective work because he is in close contact with the individual pupil. A sympathetic and an understanding teacher can often correct wrong conduct of long standing and develop a spirit of good citizenship that will be lasting even under adverse circumstances.

The following cases give the results of such efforts in one school. Most of the families in this school district are rather permanently located, and many own their homes. They are extremely interested in the welfare of their children. Cases of misconduct which could lead to delinquency are rare among children of regular residents, but often children who have been truant or incorrigible are assigned by the juvenile authorities to homes in the community. The general policy followed by the school is to treat these children as any other

new pupil is treated. The child is greeted cordially when he comes to the office to be enrolled. The teacher is glad to have the new pupil and introduces him to the class. The new pupil is treated just as is any other boy or girl. If he does things that are not approved by his classmates or by the community, he is treated in a sympathetic and friendly manner. Thus he gradually comes to realize that he has friends who are extremely interested in his welfare.

J.S. was a seventh-grade boy with habits of stealing and lying. He could lie with such a straight face that the hearer would often not even suspect his story. He lived at home with his mother, his stepfather, and a younger sister. He accused the parents of mistreating him and of favoring his sister. The parents had tried to correct him in a dictatorial manner, and the stepfather wanted him "put away." The juvenile authorities assigned him to a foster-home where he had sympathetic treatment. In school after each incident of stealing and lying, J.S. was required to make restitution, and he was talked to in a friendly manner about the results of such actions. There seemed to be improvement. Soon he became interested in writing for the school newspaper. Later, when he was in Grade VIII, he was made business manager of the paper. In this capacity he was required to handle a small amount of money. This responsibility was fulfilled in a perfectly honest manner. J.S. had become a happy and an honorable boy.

H.C. was assigned to a foster-home by the juvenile authorities because of conditions in his own home and because of his misconduct. Almost immediately he was in trouble with other children. He seemed to want to be a bully and to dominate other boys. Often he would light up a cigarette as soon as he got outside the building. H.C. might have been treated as a bad boy and handled roughly. Instead of giving summary punishment for wrongdoing, his teacher pointed out that he could not get along in the way he was going and tried to interest him in doing something constructive. Finding that he was interested in art, she praised his efforts, and he responded readily. Soon he became happy in his work and drew a large picture, of which he was very proud. When he saw that his success and happiness would be marred by misconduct outside the school, he began to make improvement. Before graduation he was transferred to a farm school and is reported to be doing well.

F.P. and S.M. were two seventh-grade boys, both over-age, below-average pupils but not especially difficult discipline problems. One fine morning the boys were absent from school. A sister of one of them reported that they were truant. The parents were notified and became very angry—the boys would "get a good beating" when they got back. The teacher persuaded the parents to let her handle the situation. Reluctantly they consented.

The boys came to school rather shamefacedly the next morning and said that

they had spent the day at the Field Museum of Natural History and at the Shedd Aquarium. The teacher recalled that these exhibits had been discussed in class. She told the boys that these were fine places to visit but asked whether it would not have been better to wait until the whole class could go together. The boys agreed that it would have been. The teacher explained the seriousness of staying away from school without the consent of parents. The boys were penitent and have never given trouble again. The wrong kind of treatment might have made delinquents of these boys, but an understanding teacher set them right.

R.H. was assigned to a home in the neighborhood because of unfavorable conditions in his own home. The parents were separated, and neither was willing to take care of the child. Their criticisms of each other in the presence of R.H. were having a bad influence. He had developed the attitude that he could get what he wanted without any thought for the rights of others. His chief faults were bullying other boys, stealing, lying, and being disorderly in class. He had the hardened attitude of a criminal. R.H. came to the school in Grade V and is now in Grade VII. Although he is still not perfect, a great change has taken place. His teachers have consistently treated him in a friendly and sympathetic manner. He has often been punished for wrongdoing, but the justice of the punishment has always been pointed out to him. Recently his teacher has succeeded in getting him interested in stamp-collecting. For many weeks before the writing of this paper, there has not been a single report of misconduct on his part.

One of the big responsibilities of the teacher is that of making good citizens as well as good students. Nothing gives a teacher a greater feeling of satisfaction than the knowledge that he has helped some unfortunate boy or girl to become a happy, useful member of society. Teachers realize more and more that success in this phase of their work is attained by a sympathetic and a friendly understanding of the difficulties, the desires, and the needs of the children with whom they work.

SELECTED REFERENCES ON ELEMENTARY-SCHOOL INSTRUCTION

I. CURRICULUM, METHODS OF TEACHING AND STUDY AND SUPERVISION

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IN THIS bibliography are included selected publications in the field of the elementary-school curriculum, methods of teaching and study, and supervision which appeared during the period from April 1, 1938, to March 31, 1939. Foreign-language titles are not included, and popular articles on the topics are not cited unless they present facts not generally known or an original and challenging point of view. The materials on curriculum and method deal with general aspects of these topics; studies dealing with specific subjects will be listed in subsequent issues.

CURRICULUM¹

416. BAGLEY, WILLIAM C. "An Essentialist's Platform for the Advancement of American Education," *Educational Administration and Supervision*, XXIV (April, 1938), 241-56

A critical appraisal of recent trends in elementary-school education, with special emphasis on practices of "progressive" education

417. BREED, FREDERICK S. "Our General Outlook on Arithmetic," *Journal of Educational Research*, XXXII (December, 1938), 241-54.

A general discussion of recent trends in the teaching of arithmetic and a critical evaluation of the stress on social arithmetic and regrading of subject matter

¹ See also Item 562 (Buswell) in the list of selected references appearing in the November, 1938, number of the *Elementary School Journal*; Items 217 (Grant) and 220 (Hockett) in the April, 1939, number of the *Elementary School Journal*; Items 13 (Caswell), 23 (Frederick and Musselwhite), and 34 (Leary) in the January, 1939, number of the *School Review*; and Item 340 (McKown) in the April, 1939, number of the *School Review*.

418. BRUNER, HERBERT B. "The Curriculum Laboratory in Action," *Curriculum Journal*, X (May, 1939), 199-202.
A discussion of basic principles that should underlie the work of a curriculum laboratory.
419. BRUNER, HERBERT B., and WIETING, C. MAURICE. "Annual List of Outstanding Courses of Study," *Curriculum Journal*, IX (December, 1938), 364-69.
A topically arranged list of courses of study in various curriculum areas selected by the Curriculum Laboratory staff of Teachers College, Columbia University.
420. *Child Development and the Curriculum*. Thirty-eighth Yearbook of the National Society for the Study of Education, Part I. Bloomington, Illinois: Public School Publishing Co., 1939. Pp. x+442.
A critical survey of available research relating to child development and the areas of the curriculum. Indicates the contribution of research to the gradation and the organization of the educational program.
421. *Education for American Life*. The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., 1938. Pp. xviii+168.
Contains a general summary of the findings of the Regents' Inquiry and of the recommendations made. An important statement.
422. FREDERICK, O. I., and MUSSELWHITE, LLOYD PACE. "Grade Placement of Problems of Life," *Journal of Educational Research*, XXXII (November, 1938), 195-204.
Contains a description of a procedure for arriving at a basis of gradation of curriculum materials and tentative findings based on this plan for "nine major areas of human activity."
423. GARVER, F. M. "Curriculum Reorganization According to the Philadelphia School Survey," *Elementary School Journal*, XXXIX (December, 1938), 257-63.
A critique of the recommendations on curriculum reorganization by the survey staff which recently completed a study of the Philadelphia school system.
424. GILLET, NORMA. "The Maturity Factor in the Grade Placement of Certain Punctuation Skills in Bibliography Form," *Journal of Educational Research*, XXXII (February, 1939), 449-55.
Reports the growth in understanding of, and ability to use, quotation marks which resulted from a period of instruction in fifth- and sixth-grade classes. These skills can be taught successfully at this level.
425. *A Guide to the Development of the Curriculum*. Bulletin No. 8. Montgomery, Alabama: State Department of Education, 1938. Pp. viii+264.
A bulletin discussing various aspects of the relation of the school and society and describing approaches to the curriculum. Illustrative units for each grade are given.

426. HANNA, PAUL R. "Organization for Curriculum Development," *Curriculum Journal*, X (March, 1939), 104-7.
Discusses principles that have been found effective in organizing the staff of a school system for work in reconstructing the curriculum.
427. HOCKEY, JOHN A. "A Comparative Analysis of the Vocabularies of Twenty-nine Second Readers," *Journal of Educational Research*, XXXI (May, 1938), 665-71.
Contains the results of an analysis of the vocabularies of second-grade readers, showing the number of words and of different words used, repetitions, and ratings. Wide variations are shown.
428. KANDEL, I. L. *Conflicting Theories of Education*. New York: Macmillan Co., 1938. Pp. xiv+178.
Discusses critically the place of education in a period of social change and unrest. The book emphasizes the necessity of adapting the form and method of education to the demands of life in a democratic society.
429. LEARY, BERNICE E. "Survey of Curriculum Laboratories," *Curriculum Journal*, IX (December, 1938), 350-54.
A report of a questionnaire study of the status, the personnel, the organization, and the functions of curriculum laboratories in colleges and cities of this country.
430. MORTON, R. L. "The National Council Committee on Arithmetic," *Mathematics Teacher*, XXXI (October, 1938), 267-72.
A preliminary report of the recommendations of the National Council Committee on Arithmetic. Defines the point of view of the committee and raises numerous problems for discussion.
431. MULHERN, JAMES. "Manuscript Schoolbooks," *Journal of Educational Research*, XXXII (February, 1939), 428-48.
Contains illustrations of some of the earlier manuscript textbooks that should be of interest to persons interested in the history of textbooks.
432. REISNER, EDWARD H. "The Job of the School in a Progressive Industrial and Democratic Society," *Teachers College Record*, XXXIX (April, 1938), 575-85.
Points out the desirability of making youth conscious of the values of the social heritage of a democracy and the spiritual qualities associated with labor.
433. RICHTMEYER, CLEON C. "Functional Mathematical Needs of Teachers," *Journal of Experimental Education*, VI (June, 1938), 396-98.
Reports a study of the kinds of mathematical needs of teachers in their affairs of everyday life outside the classroom.
434. RUGG, HAROLD (Editor). *Democracy and the Curriculum*. Third Yearbook of the John Dewey Society. New York: D. Appleton-Century Co., Inc., 1939. Pp. xiv+536.

A survey of the political, the economic, and the social backgrounds of our present-day educational program, current social needs, and efforts at curriculum reform.

435. WOOD, HUGH B. "How To Organize a Curriculum Laboratory," *Curriculum Journal*, IX (December, 1938), 345-49.

Discusses a plan for organizing a curriculum laboratory that should help others interested in such an undertaking.

METHODS OF TEACHING AND STUDY¹

436. BOWES, FERN H. "The Anecdotal Behavior Record in Measuring Progress in Character," *Elementary School Journal*, XXXIX (February, 1939), 431-35.

Describes a method of using the anecdotal record as a basis of diagnosis in character development

437. BREED, FREDERICK S. *Education and the New Realism*. New York: Macmillan Co., 1939. Pp. xx+236.

A critical appraisal of present trends in educational practices.

438. COLE, LUELLA. *Teaching in the Elementary School*. New York: Farrar & Rinehart, Inc., 1939. Pp. xvi+518.

A comprehensive discussion of methods of teaching in the elementary school.

439. *Co-operation—Principles and Practices*. Eleventh Yearbook of the Department of Supervisors and Directors of Instruction. Washington: Department of Supervisors and Directors of Instruction of the National Education Association, 1939. Pp. x+244.

Contains an analysis of the specific cause of lack of co-operation in administration, supervision, and instruction. A series of descriptions of units of work for teaching co-operation is included

440. DEWEY, JOHN. *Experience and Education*. New York: Macmillan Co., 1938. Pp. xii+116.

Discusses a "theory of experience" and points out the fact that the concept of "education as growth" has validity only if the basis of selection of instructional materials is an assurance that growth will, in fact, take place. This concept should lead to a positive, constructive attack in curriculum-making

¹ See also Item 559 (Brownell) in the list of selected references appearing in the November, 1938, number of the *Elementary School Journal*; Item 39 (Lane and Others) in the January, 1939, number of the *Elementary School Journal*; Items 192 (Segel), 215 (Gates and Russell), and 222 (Miller) in the April, 1939, number of the *Elementary School Journal*; Item 5 (Bode) in the January, 1939, number of the *School Review*; Item 395 (Prescott) in the May, 1939, number of the *School Review*; and Item 423 (Courtis) in the June, 1939, number of the *School Review*.

441. DIMMICK, EARL A. "An Appraisal of an Elementary School Reorganization in Terms of Its Effect upon the Children Who Attend It," *Journal of Educational Research*, XXXII (October, 1938), 91-101.
Discusses a modified platoon-school organization using the remedial-group plan together with adaptations of the "activity" school. The author shows that this plan was more effective for maladjusted learners than the standard platoon-school organization.
442. GATES, ARTHUR I. "Basic Principles in Reading Readiness Testing," *Teachers College Record*, XL (March, 1939), 495-506.
A summary of principles growing out of extended research on reading-readiness testing, emphasizing the predictive value of such tests and their place in the instructional program as diagnostic devices.
443. GATES, ARTHUR I. "An Experimental Evaluation of Reading-Readiness Tests," *Elementary School Journal*, XXXIX (March, 1939), 497-508.
Reports the results of a number of studies of the validity of a group of reading-readiness tests as predictive of success in learning to read. A very good study.
444. GATES, ARTHUR I., and RUSSELL, DAVID H. "The Effects of Delaying Beginning Reading a Half Year in the Case of Underprivileged Pupils with I. Q.'s 75-95," *Journal of Educational Research*, XXXII (January, 1939), 321-28.
Shows that postponing reading a half-year for underprivileged children is, on the whole, a desirable practice in terms of growth of reading ability and general social adjustment of the pupils.
445. GOOD, CARTER V. "Problems and Technique of Educational Diagnosis and Adjustment," *School and Society*, XLVIII (August 27, 1938), 261-67.
Analyzes the problems in the fields of diagnosis and points out the lack of systematic research in a number of important areas.
446. HOCKETT, JOHN A., and JACOBSEN, E. W. *Modern Practices in the Elementary School*. Boston: Ginn & Co., 1938. Pp. vi+346.
A discussion of the theory and the practices of modern elementary education. Emphasis is placed on units of work which make the most of the environment, utilize creative abilities of children, and meet individual needs of pupils.
447. HORRALL, ALBION H., CODONE, LYDIA E., WILLSON, MADEI S., and RHODES, JEAN SMITH. *Let's Go to School*. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xii+434.
Contains a statement of principles underlying an enriched modern elementary-school program and descriptions of three units of instruction.

448. *The Implications of Research for the Classroom Teacher*. Joint Yearbook of the American Educational Research Association and the Department of Classroom Teachers. Washington: National Education Association, 1939. Pp. 318.
Contains a series of eighteen chapters dealing with various areas of instruction, in which are summarized research findings in each field. Questions are varied in each chapter, and "best answers" are given by specialists in each field.
449. JENSEN, ALMA M. "An Experimental Social Studies Curriculum," *Curriculum Journal*, X (January, 1939), 15-18.
Discusses a procedure used in developing an experimental social-studies curriculum in Minnesota, the problems encountered, and the methods of solving them.
450. KNIGHT, ELTON E. "A Study of Double Grades in New Haven City Schools," *Journal of Experimental Education*, VII (September, 1938), 11-18.
An experimental evaluation of learning in rooms containing one and two grades. Little difference in achievements of pupils was found.
451. KVARACEUS, WILLIAM C., and WILES, MARION E. "An Experiment in Grouping for Effective Learning," *Elementary School Journal*, XXXIX (December, 1938), 264-68.
Reports an experimental study of the value of a modified form of ability grouping in the primary grades.
452. MONROE, WALTER S., and MARKS, ARLYN. "General Methods of Teaching," *Educational Administration and Supervision*, XXIV (October, 1938), 497-512.
A historical discussion of the evolution of nine methods of teaching.
453. MONROE, WALTER S., and MARKS, ARLYN. "General Methods of Teaching Evaluated: Results of Research," *Educational Administration and Supervision*, XXIV (November, 1938), 581-92.
Discusses the findings and the limitations of research dealing with the appraisal of six general methods of teaching.
454. MOSSMAN, LOIS COFFEY. *The Activity Concept*. New York: Macmillan Co., 1938. Pp. xviii+198.
Presents briefly and concisely the fundamentals of progressive education, stressing the phase commonly termed "the activity movement."
455. PITTINGER, B. F. "The Teacher in the Modern School," *Elementary School Journal*, XXXIX (November, 1938), 177-86.
Contains a general discussion, in the light of the findings of educational science, of the functions of the teacher in the schools of a changing society.
456. PUNKE, HAROLD H. "Sociological Factors in Absence from School," *Journal of Educational Research*, XXXII (December, 1938), 282-90.

- Discusses the relation between absence from school and place of residence, sex, age, parental status, scholastic retardation, and sibling position.
457. RISEN, MAURICE L. "Relation of Lack of One or Both Parents to School Progress," *Elementary School Journal*, XXXIX (March, 1939), 528-31. Statistical data show that "lack of one or both parents seems to affect every phase of school work unfavorably."
458. STRETCH, LORENA B. *The Curriculum and the Child*. Minneapolis, Minnesota: Educational Publishers, Inc., 1939. Pp. xiv+504. First discusses general principles of education and then applies them concretely to the various areas of the elementary-school program.
459. TERMAN, LEWIS M. "The Gifted Student and His Academic Environment," *School and Society*, XLIX (January 21, 1939), 65-73. A review of the findings of the California study of gifted children, including their status as they reach maturity.
460. VAUGHN, JAMES, and DISERENS, CHARLES M. "The Experimental Psychology of Competition," *Journal of Experimental Education*, VII (September, 1938), 76-97. A summary of numerous investigations of the effects of competition on learning. An extensive bibliography is included.
461. WEST, RUTH (Editor). *Utilization of Community Resources in the Social Studies*. Ninth Yearbook of the National Council for the Social Studies. Cambridge, Massachusetts: National Council for the Social Studies, 1938. Pp. vi+230. Discusses what many community-centered schools are doing to utilize the community for vitalizing and enriching the instructional program.
462. WITTY, PAUL, and KOPPEL, DAVID. "Studies of the Activities and Preferences of School Children," *Educational Administration and Supervision*, XXIV (September, 1938), 429-41. A description of procedures for use in studying the needs and the interests of children as a basis for planning instructional activities.
463. WOFFORD, KATE V. *Modern Education in the Small Rural School*. New York: Macmillan Co., 1938. Pp. xiv+582. Discusses the one-room rural school, its relations to our changing society, and its function as the center of rural social and intellectual life. Helpful suggestions are given for organizing instruction in small schools.
464. WOOLY, GRACE. "Similarities and Differences in the Play Activities of Children in Two Public Schools with Contrasting Environment," *Journal of Experimental Education*, VII (December, 1938), 145-57. Finds marked differences in the "level" of the play activities engaged in by children in two strongly contrasting environments.

SUPERVISION¹

465. BARR, A. S., BURTON, WILLIAM H., and BRUECKNER, LEO J. *Supervision*. New York: D. Appleton-Century Co., Inc., 1938. Pp. viii+982.

A comprehensive discussion of principles and practices of supervision. There are four parts to the book: "The Background of Modern Supervision," "Studying the Teaching-learning Situation," "Improving the Teaching-learning Situation," and "Improving the Means, Methods, and Outcomes of Supervision."

466. BRUBACHER, JOHN S. "A Proposal for Judging What Is and What Is Not Progressive Education," *School and Society*, XLVIII (October 22, 1938), 509-19.

Draws on a series of five "conceptions" that may be used as criteria.

467. CALVERT, EVERETT T. "Democratic and Creative Supervision in Principle and in Practice," *Educational Method*, XVIII (November and December, 1938), 54-60, 100-105.

A comprehensive discussion of forty-four services and devices for democratic and creative supervision.

468. CONNETTE, EARLE. "Supervisory Procedures and Their Relative Desirability," *Journal of Educational Research*, XXXII (November, 1938), 182-94.

Summarizes procedures in supervision recommended in articles and textbooks in supervision and describes a plan of evaluating them from the point of view of their desirability for use in the field of music.

469. COUNTS, GEORGE S. "The Current Challenge to Our Democratic Heritage," *Progressive Education*, XVI (February, 1939), 91-97.

A penetrating survey of attacks on democratic ideals and a statement of the author's position as to the stand that the school should take in this connection.

470. DAVIS, MARY D. *Preparation for Elementary School Supervision*. United States Office of Education Bulletin No. 18, 1937. Pp. vi+76.

Reports the results of an analysis of courses concerned with elementary-school supervision which are offered in 786 institutions

¹ See also Item 687 (Connette) in the list of selected references appearing in the December, 1938, number of the *Elementary School Journal*; Items 8 (Ford), 37 (Goodykooniz and Lane), 56 (Myers, Kifer, Merry, and Foley), and 59 (Smith and Speer) in the January, 1939, number of the *Elementary School Journal*; Item 65 (Coulbourn) in the February, 1939, number of the *Elementary School Journal*; Item 193 (Wrightstone, Rechetnick, McCall, and Loftus) in the April, 1939, number of the *Elementary School Journal*; and Item 63 (Reeder) in the January, 1939, number of the *School Review*.

471. *Educational Tests and Their Uses*. Review of Educational Research, Vol. VIII, No. 15. Washington: American Educational Research Association, 1938. Pp. 493-594.

Contains a bibliography and a digest of researches dealing with many phases of educational tests and their uses, published during the three-year period, July, 1935, to June, 1938.

472. MCCALL, W. A. *Measurement*. A revision of *How To Measure in Education*. New York: Macmillan Co., 1939. Pp. xvi+536.

A comprehensive discussion of the place of measurement in education. Criteria for the selection and the construction of standard tests are described. Uses of tests for grouping, guidance, and evaluation of teaching and marking are discussed.

473. MYERS, ALONZO F., and KIFER, LOUISE M. *Problems in Public School Supervision*. New York: Prentice-Hall, Inc., 1939. Pp. xii+212.

Contains a series of forty supervisory problems. For each problem there is a description of a situation, a group of questions relating to the problem, and a set of references to guide the student.

474. NEELEY, DETA P. "The Effect of Planned Supervision on Teaching as Shown by Objective Analyses of Classroom Activities," *Educational Administration and Supervision*, XXIV (May, 1938), 341-54.

Discusses the value of a graphic record of time consumed in activities as a means of locating causes of difficulties in specific teaching situations.

475. NEELEY, DETA P. "The Improvement of Reading through Creative Supervision," *Educational Administration and Supervision*, XXV (January, 1939), 45-56.

Describes techniques for surveying the status of reading instruction and suggests means of helping teachers overcome their problems.

476. NEWELL, BERNICE "Trends in Community Surveys," *Educational Method*, XVIII (October, 1938), 7-13.

Contains a helpful summary of present-day community surveys and their bearing on problems of instruction.

477. REEVES, FLOYD W. "The Social Philosophy of Teachers," *Elementary School Journal*, XXXIX (October, 1938), 97-111.

Contains a critique of studies of the social philosophies of teachers and suggests a program in this field for teacher-training institutions.

478. *Schools in Small Communities*. Seventeenth Yearbook of the American Association of School Administrators. Washington: American Association of School Administrators, 1939. Pp. 608

A discussion of the instructional programs of schools in rural areas.

479. STRATEMEYER, CLARA. *Supervision in German Elementary Education 1918-1933*. Teachers College Contributions to Education, No. 734. New York: Teachers College, Columbia University, 1938. 1p. vi+172.

A discussion of changes in supervision in Germany during three periods, ending with the period of dictatorship. A well-documented report.

480. TIEGS, ERNEST W. *Tests and Measurements in the Improvement of Learning*. Boston: Houghton Mifflin Co., 1939. 1p. xxii+490.

Emphasizes the uses of measurement in the diagnosis and the direction of learning and in the general appraisal of the educational program.

481. WRIGHTSTONE, J. W. *Appraisal of Newer Elementary School Practices*. New York: Teachers College, Columbia University, 1938. 1p. xiv+222.

Discusses means of appraising outcomes of modern educational practices concerned with adjustment, interests, creative expression, critical thinking, and mental hygiene. Comparisons of results for conventional and experimental schools are given.

482. WRIGHTSTONE, J. W.; RECHETNICK, JOSEPH; MCCALL, WILLIAM A.; and LOFTUS, JOHN J. "Measuring Social Performance Factors in Activity and Control Schools of New York City," *Teachers College Record*, XL (February, 1939), 423-32.

A comparative measurement of certain intellectual, dynamic, and social-performance factors indicates, in general, equal or superior achievement for the "activity" practices.

Educational Writings



REVIEWS AND BOOK NOTES

PROBLEMS CONFRONTING ELEMENTARY-SCHOOL TEACHERS.—Current developments in educational theory and practice are constantly creating problems for elementary-school teachers. Not only do old problems have to be met, but new problems are arising continuously out of the changing educational scene. Luella Cole's new book¹ endeavors to provide answers to the precise needs of teachers. The statements of 1,377 elementary-school teachers, as summarized in studies by William Henry Morton (*Everyday Problems of the Elementary School Teacher*, Lincoln, Nebraska: University of Nebraska, 1930) and by L. W. Moore ("Difficulties Recognized by Elementary Teachers," *Birmingham-Southern College Bulletin*, Vol. XXVII, No. 6 [1934]), furnish the point of departure for the book.

The volume is divided into five parts, totaling twenty-six chapters. Part I deals with "The Teacher and Her Background"; Part II is entitled "The Teacher and Her Class"; Part III discusses "The Teacher and Her Subject Matter"; Part IV treats "The Teacher's Professional and Social Relationships"; and Part V describes "The Teacher at Work." The entire volume is generously sprinkled with footnote references. Each chapter concludes with a brief bibliography divided into two parts; (1) general references which cover roughly the same topics as those treated by Cole and (2) illustrative research studies.

To prepare a book which gives precise suggestions on specific problems recognized and stated by classroom teachers is not an easy task, especially if discussion on a wide array of topics is crowded between the covers of a single book. Such treatment is likely to produce a curious mixture of good sense, sound advice, practical helps, abbreviated generalizations which are not entirely true, dogmatic pronouncements, and some questionable conclusions. One of the greatest difficulties lies in the fact that the questions, if taken from large numbers of teachers, come from teachers in conventional school situations. To answer these questions means that help is being given teachers in solving problems which might not exist if their school programs were in harmony with modern concepts of education. What an author does in such a book is to write a volume in 1938 which answers the questions that arose in the kind of educational program in common use ten or more years ago. Naturally such a book sounds conservative and old fashioned as compared with 1939 models.

There is much need for the type of thing that Cole has tried to do. Beginning

¹ Luella Cole, *Teaching in the Elementary School*. New York: Farrar & Rinehart, Inc., 1939. Pp. xvi+518. \$2.50.

with the problems that the teacher himself recognizes and branching out from there is sound educational procedure. The aforementioned difficulties arise when the inclusion of too many topics in one volume forces an abbreviated treatment. Perhaps what is needed is a number of smaller volumes, each book treating one topic or a few related topics in a discussion long enough to make it possible for the full import of modern psychology and philosophy to be explained to the teacher in relation to the problem. Such a presentation would permit a developmental discussion of the topic and thus lead the teacher's thinking from an acute problem in a conventional setting to the nature of the problem in a more up-to-date school program.

HENRY J. OTTO

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MIDDLE-OF-THE-ROAD EDUCATIONAL PHILOSOPHY.—One of the outstanding movements in American education in the past generation has been the rise of progressive education. This movement has been the direct outgrowth of the pragmatic philosophy of John Dewey and his followers, and it constitutes a fundamental challenge to the older disciplinary concepts of education, which are based on an opposing philosophy known as "realism." These opposing philosophies have raised some very fundamental issues for educational procedure and have divided American educators into two large camps. Some of the more important of these issues have revolved around such matters as "interest versus effort," "projects versus subjects," "the child-centered school," and "the integration of personality." Authors of much of the educational literature on the subject and speakers in educational meetings have discussed these problems without taking care to relate them to the basic philosophies upon which they rest.

In a recent publication¹ an attempt has been made to assess progressive education in terms of its underlying philosophy (pragmatism) and, on the other hand, to set forth, without apology, the opposing doctrine of realism, and to discuss fully the educational implications of each. This task has been well done. The author is peculiarly qualified in training and experience for the task which he set for himself, and he has produced a volume that every serious student of American education should not only read but study. A careful study of this volume will do much to clarify the hazy thinking which in recent years has surrounded many of the educational debates on the strength and the weaknesses of progressive education. It will also aid much in preserving the values of the movement and at the same time in ridding it of its major defects.

The author of this excellent treatise is frank to admit that the answer to our educational problem is not to be found in either of the extreme forms of these

¹ Frederick S. Breed, *Education and the New Realism*. New York: Macmillan Co., 1939. Pp. xx+236 \$2.00

philosophies, and he recognizes that the desirable course of action in most of the issues involved lies somewhere between the two extreme points of view. For example, in the case of the issue of method versus materials, the final answer is one of the degree of emphasis to be given to each. The progressives' emphasis on method has been a concerted attack on the earlier concentration of attention on subject matter to the neglect of pupil interest and personality growth. Every sensible educator knows that this new emphasis on the learner and on his interests and personality needs has made some great contributions to educational progress, and he believes that these contributions should certainly be conserved. At the same time he knows that educational content, carefully selected and adapted to psychological laws of learning, is also essential to satisfactory educational progress. It should be noted that, although the author admits the necessity of a middle-of-the-road policy in most of the issues posed by progressive education, he is frank to take his position on the side of a realistic approach to educational problems and to believe in the educational implications which this philosophy requires.

This book is a welcome contribution to educational literature and is heartily recommended for serious study.

HOMER P. RAINEY

University of Texas

A BACKGROUND FOR GUIDANCE WORK OF TEACHERS.—Not many years have elapsed between the time when "Personality" was the title of the concluding chapter in a psychology textbook (and a rather vague chapter at that) and the present when it is the subject of a textbook¹ in its own right. The psychoanalysts and mental hygienists, the biologists and hereditarians, and the psychologists themselves, including the behaviorists, the Gestalters, and the test-makers—all have been piling up their contributions, with the result that investigations of the reactions of the organism have given way to, or have been interpreted in the light of, an interest in the behavior of the organism as a whole.

The present volume draws from all these sources, supported by the scholarly work of Roback and the Allports. It is well documented (it might be accused of being overdocumented) and clearly written. It proceeds logically from the vexed problem of definition, through the biological foundations, the relation of intelligence and environment, the relation of drives and emotion, and the confusion of trait names and ratings, to the melioristic view of improvement in personality adjustments. "Questions for Stimulating Thought and Discussion" and "Recommended Readings" conclude each of the eleven chapters. The format is excellent.

In short, the book is ready for courses leading to the Master's degree in education, building, as it does, on introductory and educational psychology and presenting research results and theoretical positions clearly and understand-

¹ Louis P. Thorpe, *Psychological Foundations of Personality: A Guide for Students and Teachers*. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xvi+602. \$3 50.

ably. It does not aim to tell educators just what to do in problem situations which may arise, but it should enable them to understand better the patterns of personality adjustment and hence to deal more intelligently with the pupils whose school lives they are called on to guide.

WILLIAM CLARK TROW

University of Michigan

COMMUNITY CIVICS FOR YOUNG AMERICANS.—In its report (*The Teaching of Government*, New York: Macmillan Co., 1916) the Committee on Instruction of the American Political Science Association devoted a little over four pages to civics in the first six grades of the traditional elementary school. This committee recommended that the fundamental civic virtues as applied to the home, to the school, and to the neighborhood be emphasized in Grades I–III and that community services, interests, helpers, and activities be the centers of interest in Grades IV–VI. There is much evidence in the courses of study appearing after 1916 that the recommendations of this committee were taken more or less seriously. One ever-present handicap, however, has faced practical school people in their efforts to conform to the recommendation of the committee, namely, the lack of suitable material to place in the hands of children. While many promising efforts were made prior to 1936 to remove this handicap, few of them equaled, and certainly none surpassed, those embodied in a series of volumes that appeared in 1938 under the general title, "The Young American Civic Readers."¹

Of the three volumes comprising this series, *Community Helpers* is the most elementary. Its content largely concerns the fundamental civic virtues recommended by the committee mentioned above and is adapted to Grade III or IV. The stories and the activities in this volume are concerned with obedience, helpfulness, courteousness, respectfulness, patriotism, truthfulness, honesty, and kindness, and with workers who bring us food, help clothe us, give us shelter, bring us fuel, and care for our health. Throughout the volume an abundance of activities is suggested—activities that are intended to implement the content of the stories.

In the Foreword to *Community Activities* the authors state that it is the first book of the series. This statement is evidently an error inasmuch as the same is said about *Community Helpers* in its Foreword. Be this as it may, the material and the activities in *Community Activities* are more advanced than those in *Community Helpers* even though the content of the two volumes is closely related. Everyday habits of useful citizens, everyday public helpers and patriotic citizens are the general topics treated in *Community Activities*. Children in Grades IV and V will not find the stories and the activities in this volume beyond their interest and capacities.

¹Samuel Berman, Jane Bayre Fryer, and J. Lynn Barnard, *The Young American Civic Readers: Community Helpers*, pp. xli+244, \$0.72; *Community Activities*, pp. xli+252, \$0.76; *Community Interests*, pp. xli+274, \$0.80. Philadelphia: John C. Winston Co., 1938.

Community Interests, the third book of the series, is concerned with a multiplicity of items and activities. Part I is organized around four so-called "units," entitled "Water," "Gas," "Electricity," and "The Telephone." A little over half the volume is devoted to these units. Parts II and III have but one unit each. These are entitled "Neighborhood Affairs" and "Understanding Our World." The titles of the parts are "Community Interests" and "Understanding Our Neighbors." With the title of a part exactly the same as the title of the volume and the title of a unit almost the same as the title of the part in which it is placed, there certainly is ample opportunity for the reader to become confused. He is tempted to ask: Why so much ado about parts and units? Children in Grades V and VI will not find the material in this volume difficult.

The three volumes as a whole contain a multifarious variety of materials, such as factual stories, dramatizations, poems, imaginative stories, pictures, cartoons, and letters. That they achieve unity and coherence in the presentation of such a variety of types of material is too much to demand of the authors. Even though the adult reader, on finishing the volumes, is a little confused and bewildered, it is not likely that the children for whom the books are intended will ever be conscious of the lack of unity and coherence. In fact, the variety that the volumes contain will probably be the aspect most prized by juvenile readers.

R. M. TRYON

University of Chicago

HISTORY IS A STORY.—This textbook in history¹ for junior high schools possesses two characteristics of a good mystery story: (1) The editor "found" the manuscript in a safe. (2) The book is interesting. Mr. Moon has organized the manuscript for teaching purposes into eleven units, the first six of which are arranged in chronological sequence and trace the development of our country to about 1850. The second half of the book is divided into five units, two of which represent completely topical treatment. "How the States Were Bound Together" considers roads, canals, newspapers, telegraph, etc., and "How Small Inventions Made Big Industries" treats travel, transportation, and inventions for factory and farm.

Many things about this book will appeal to the reader whether he be teacher or pupil. Important concepts and episodes are developed at length, and elements of less importance are eliminated. Thus the pupil is told to look elsewhere for the story of Cortez and Pizarro, but Magellan's voyage is discussed in one and a half pages of text. The author frequently arouses interest by centering the reader's attention on a typical development or person (the story of Daniel Boone covers about three pages) and by making effective use of source material. Thus the story of the Lewis and Clark Expedition fills about three and a half pages, more than two of which are based directly on the *Journals of Lewis and Clark*. Generally speaking, the life of the people in all periods is treated ade-

¹ Glenn W. Moon, *Story of Our Land and People*. New York: Henry Holt & Co., 1938. Pp. xii+564. \$1.92.

quately and effectively. The illustrations are integrated with the text, and a number of graphic representations using the symbols developed by Pictorial Statistics, Inc., are helpful. Each of the chapters is followed by some excellent suggestions for further reading, some carefully thought out activities, and a small number of thought-provoking questions.

In the opinion of this reviewer, the *Story of Our Land and People* could be greatly improved in two respects. The eighteen colored maps (or most of them) might be eliminated. Each lacks a scale of miles, lines of longitude and latitude, and is characterized by a subordination of geographical detail in the interest of "artistic" effect. If this criticism seems a strong indictment, consider, for example, the map opposite page 20 showing medieval trade routes. The Red Sea, the Persian Gulf, the Black Sea, and the Adriatic Sea are represented as closed bodies of water, and the land for several hundred miles north of India is sketched as a great desert with palm trees and cacti. It would help also if the text had been read carefully to eliminate errors of fact and interpretation. Only a few of the necessary revisions can be suggested in this review. During the Middle Ages were goods likely to be shipped from India to the Persian Gulf for transshipment to the Red Sea? (P. 7.) Did England for a century after 1497 engage in a life-and-death struggle with France and Spain only to find peace under Elizabeth? (P. 32.) Did the French in America prior to 1763 circulate francs worth twenty cents? (P. 72.) Did it take three years of civil war for the French rebellion to turn into a revolution and did the Directory send its enemies, including King Louis and his queen, to the guillotine? (P. 193.) Did most pioneer families in Indiana and Illinois have to do without salt because it cost six to eight dollars a bushel when transported from the East by packhorse and boat? (P. 284.) Is "nothing" an entirely adequate answer to the question of what the United States gained from its participation in the World War? (P. 511.)

HOWARD R. ANDERSON

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THE CITIZEN AND HIS OBLIGATIONS.—One of the current tendencies in civic education is the attempt to develop in the pupil an awareness of his obligations to his constantly expanding circle of interests, to enable him to participate in the activities with which he comes in contact and to express himself in the groups with which he is associated. This broad concept is the aim of the book here reviewed.¹ This book is one of the volumes of the social-studies series entitled "Our Developing Civilization."

The book is divided into four parts. Part I deals with the responsibility of the citizen to himself—his duty to maintain physical, mental, moral, vocational, economic, and civic efficiency. Part II deals with the citizen in his relations with his family, his school, and his community. Part III reveals the community as it functions through its citizens. Part IV emphasizes the responsibility of the

¹ G. L. Blough and C. H. McClure, *Fundamentals of Citizenship*. Chicago: Laidlaw Bros., 1939. Pp. 446. \$1.20.

individual to his government. An appendix contains many items of interest that should contribute to the book's value as a textbook, among which are the Declaration of Independence, the Constitution of the United States, a discussion of the proper use of the flag, and an explanation of terms. The Appendix also includes a "Compendium of Civic Information," which contains numerous civic facts about both state and national affairs.

Special effort is made to vitalize the material with which the pupil comes in contact. Each of the four parts is preceded by a short overview, and each chapter begins with a "preparatory note" which calls attention to the importance of the material in the chapter. Lists of learning aids, test exercises, and suggested activities follow each chapter. Many of the suggested activities should be especially worth while in assisting the teacher in providing additional items for the more capable pupils.

Some portions of the book would be strengthened by the inclusion of more factual materials. Fewer pictures are included than in some similar volumes, but this lack is compensated for by the inclusion of many enlightening graphs and pictographs, which should be helpful to pupils as aids to their understanding of present trends. Adequate consideration is given to economic conditions, which are properly interrelated to the social life and to political institutions. The book is up to date, emphasis being placed on current problems. The new governmental agencies and modern trends in government are not overlooked. The content is made appealing and challenging by addressing much of the material to the reader.

As a whole, this publication is a worth-while addition to the teaching materials in the social-studies field and should be a valuable textbook for use in the upper elementary grades.

FREMONT P. WIRTH

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

ATKINSON, CARROLL *Development of Radio Education Policies in American Public School Systems*. Edinboro, Pennsylvania: Edinboro Educational Press, 1939. Pp. vi+280. \$1.50.

Conference on Examinations: Under the Auspices of the Carnegie Corporation, the Carnegie Foundation, the International Institute of Teachers College, Columbia University, at the Hotel Royal, Dinard, France, September 16 to 19, 1938. Conference Organized and Proceedings Edited by Paul Monroe New York: Teachers College, Columbia University, 1939. Pp. xiv+330 \$3.15.

- ECKERT, RUTH E., and MARSHALL, THOMAS O. *When Youth Leave School. The Regents' Inquiry into the Character and Cost of Public Education in the State of New York.* New York: McGraw-Hill Book Co., Inc., 1939. Pp. xviii+360. \$3.00.
- EDWARDS, NEWTON. *Equal Educational Opportunity for Youth: A National Responsibility.* A Report to the American Youth Commission. Washington: American Council on Education, 1939. Pp. x+190. \$2.00.
- ELSBREE, WILLARD S. *The American Teacher: Evolution of a Profession in a Democracy.* New York: American Book Co., 1939. Pp. x+566. \$2.75.
- FAY, JAY WHARTON. *American Psychology before William James.* New Brunswick, New Jersey: Rutgers University Press, 1939. Pp. x+240. \$2.50.
- FLETCHER, B. A. *The Next Step in Canadian Education: An Account of the Larger Unit of School Administration.* Studies of the Institute of Public Affairs at Dalhousie University. Toronto, Canada: Macmillan Co. of Canada, Ltd., 1939. Pp. xvi+202. \$2.00.
- HAMRIN, SHIRLEY A., and ERICKSON, CLIFFORD E. *Guidance in the Secondary School.* New York: D. Appleton-Century Co., Inc., 1939. Pp. xii+466. \$2.75.
- HEATON, KENNETH L., and WEEDON, VIVIAN. *The Failing Student: A Study of Academic Failure and the Implication for Education.* Chicago: University of Chicago Press, 1939. Pp. x+286. \$2.50.
- HOLMES, LULU. *A History of the Position of Dean of Women in a Selected Group of Co-educational Colleges and Universities in the United States.* Teachers College Contributions to Education, No. 767. New York: Teachers College, Columbia University, 1939. Pp. vi+142.
- JUDD, CHARLES H. *Educational Psychology.* Boston: Houghton Mifflin Co., 1939. Pp. xx+566. \$2.25.
- Local Broadcasts to Schools.* Edited by Irvin Stewart. Chicago: University of Chicago Press, 1939. Pp. viii+240. \$2.00.
- MORTON, ROBERT LEE. *Teaching Arithmetic in the Elementary School: Vol. III, Upper Grades.* New York: Silver Burdett Co., 1939. Pp. x+470. \$2.80.
- NELSON, ESTHER MARION. *An Analysis of Content of Student-teaching Courses for Education of Elementary Teachers in State Teachers Colleges.* Teachers College Contributions to Education, No. 723. New York: Teachers College, Columbia University, 1939. Pp. viii+332. \$3.15.
- NORTON, T. L. *Public Education and Economic Trends.* Cambridge, Massachusetts: Graduate School of Education, Harvard University, 1939. Pp. 196. \$1.50.
- PROSSER, CHARLES ALLEN. *Secondary Education and Life.* The Inglis Lecture, 1939. Cambridge, Massachusetts: Harvard University Press, 1939. Pp. 92. \$1.00.
- REARICK, ELIZABETH C. *Dances of the Hungarians.* Teachers College Contributions to Education, No. 770. New York: Teachers College, Columbia University, 1939. Pp. viii+152. \$2.10.

- ROEMER, JOSEPH, and HOOVER, OLIVER. *The Dean of Boys in High School: His Qualifications and Functions*. New York: American Book Co., 1939. Pp. viii+94. \$1.00.
- SALISBURY, FRANK SEELY. *Human Development and Learning: An Interpretive Introduction to Psychology*. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xviii+514. \$3.00.
- SEARS, PAUL B. *Life and Environment: The Interrelations of Living Things*. New York: Teachers College, Columbia University, 1939. Pp. xx+176. \$1.85.
- STOLPER, B. J. R., and FENN, HENRY C. *Integration at Work: Six Greek Cities: An Experience with Social Studies, Literature, and Art in the Modern High School*. New York: Teachers College, Columbia University, 1939. Pp. viii+166. \$1.85.
- TANSIL, REBECCA CATHERINE. *The Contributions of Cumulative Personnel Records to a Teacher-Education Program: As Evidenced by Their Use at the State Teachers College at Towson, Maryland*. Teachers College Contributions to Education, No. 764. New York: Teachers College, Columbia University, 1939. Pp. viii+158. \$1.60.
- TIEGS, ERNEST W. *Tests and Measurements in the Improvement of Learning*. Boston: Houghton Mifflin Co., 1939. Pp. xxii+490. \$2.75.
- WAPLES, DOUGLAS. *Investigating Library Problems*. Chicago: University of Chicago Press, 1939. Pp. xvi+116. \$1.00.
- WEBB, L. W., and SHORWELL, ANNA MARKT. *Testing in the Elementary School*. Revised edition of *Standard Tests in the Elementary School*. New York: Farrar & Rinehart, Inc., 1939. Pp. xx+408. \$2.75.
- WILLIAMSON, E. G. *How To Counsel Students: A Manual of Techniques for Clinical Counselors*. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xx+562. \$3.75.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL
TEACHERS AND PUPILS

- AMES, JESSE H., AMES, MERLIN M., and STAPLES, THOMAS S. *Our Land and Our People: The Progress of the American Nation*. St. Louis, Missouri: Webster Publishing Co., 1939. Pp. xiv+690. \$1.80.
- BREED, FREDERICK S., and SEALE, ELLIS C. *My Word Book: A Course of Integrated Activities in Spelling*. Grade Two, pp. 92; Grade Three, pp. 98; Grade Four, pp. 112; Grade Five, pp. 112; Grade Six, pp. 116. Chicago: Lyons & Carnahan, 1937, 1938, 1939.
- BURCH, GLADYS, and WOLCOTT, JOHN. *A Child's Book of Famous Composers*. New York: A. S. Barnes & Co., 1939. Pp. 184. \$1.50.
- CHADSEY, CHARLES E., WEINBERG, LOUIS, and MILLER, CHESTER F. *America in the Making: From Wilderness to World Power*. Boston: D. C. Heath & Co., 1939. Pp. xviii+720+xlvi. \$1.76.

- The Child Development Readers. *Reading for Fun* by Julia Letheld Hahn, pp. vi+154, \$0.60; *Finding Friends* by Julia Letheld Hahn, pp. vi+152, \$0.76; *Making Visits* by Julia M. Harris, pp. vi+248, \$0.84; *Meeting Our Neighbors* by Jennie Wahlert and Julia Letheld Hahn, pp. vi+312, \$0.88. Boston: Houghton Mifflin Co., 1939.
- HOWARD, ETHEL K. *How We Get Our Food*. New York: Harcourt, Brace & Co., 1939. Pp. 112. \$0.88.
- JONES, EASLEY S. *Live English: Book I, A Basic Text in Forming Language Habits: Writing, Sentence Sense, Paragraph Sense, Speaking, Reading, Using Books as Tools, Grammar, Spelling, Clear and Correct Manuscript, Habits of Courtesy and Accuracy, Clear Thinking*, pp. xviii+386, \$1.32; *Book II, A Basic Text in Forming Language Habits: Speaking, Reading, Using Books as Tools, Writing, Spelling, Punctuating, Organizing, Securing Realness and Aliveness in Expression, Thinking Concretely and Clearly*, pp. xx+366, \$1.32; *Books I and II combined*, pp. xxviii+644, \$1.80. New York: D. Appleton-Century Co., Inc., 1939.
- KINNEMAN, JOHN A., and ELLWOOD, ROBERT S. *Living with Others*. Boston: Houghton Mifflin Co., 1939. Pp. xii+532+viii.
- LAW, FREDERICK HOUK. *Civilization Builders*. New York: D. Appleton-Century Co., Inc., 1939. Pp. x+356. \$1.32.
- LENNES, N. J. *New Practical Mathematics*. New York: Macmillan Co., 1939. Pp. x+426.
- MEYERS, J. G., HAMER, O. STUART, and GRISSE, LILLIAN. *The Old World and Its Gifts*. Chicago: Follett Publishing Co., 1939. 1p. viii+552. \$1.96.
- MURRA, WILBUR F. (Chairman), and OTHERS. *Bibliography of Text-Books in the Social Studies for Elementary and Secondary Schools*. Bulletin No. 21. Cambridge, Massachusetts: National Council for the Social Studies, 1939. Pp. 80. \$0.50.
- PARK, DOROTHEA. *Pets Are Fun*. Boston: Houghton Mifflin Co., 1939. Pp. 92. \$0.68.
- PERKINS, LUCY FITCH (text completed by ELEANOR ELLIS PERKINS). *The Dutch Twins and Little Brother*. Boston: Houghton Mifflin Co., 1938. Pp. 78. \$0.60.
- Teachers' Lesson Unit Series. No. 101, *The Vacation Unit* (Grades I to VI) by Eula Atkinson Johnston and Anna Leah Carpenter. New York: Teachers College, Columbia University, 1939. Pp. vi+26. \$0.40.
- WATTERS, GARNETTE, and COURTIS, S. A. *A Picture Dictionary for Children: A First Guide to the Meanings, Spellings and Use of Words and a Fascinating Introduction to the Adventure of Building a Vocabulary*. New York: Grosset & Dunlap, 1939. Pp. 478. \$1.00.

PUBLICATIONS IN PAMPHLET FORM

- ARNETT, TREVOR. *Trends in Current Receipts and Expenditures and in Receipts for Capital Purposes of Endowed Universities and Colleges, and in Current*

- Receipts of State Institutions in the United States from 1927-28 through 1936-37.* Occasional Papers No. 12. New York: General Education Board, 1939. Pp. xiv+158.
- BREWINGTON, ANN, and BERG, EVELYN. *State Certification of Teachers of Business Education.* National Association of Commercial Teacher-training Institutions, Bulletin No. 16. Muncie, Indiana: Vernal H. Carmichael, President (% Ball State Teachers College), 1939. Pp. 32.
- The Challenge of Progressive Education.* Proceedings of the Fourth Conference on Education and the Exceptional Child under the Auspices of Child Research Clinic of the Woods Schools. Langhorne, Pennsylvania: Child Research Clinic of the Woods Schools, 1938. Pp. 70.
- CHRYSOSTOME, F.É.C., FRÈRE. *La Notion de relation chez l'enfant.* Bulletin No. 1 de l'institut pédagogique Saint-Georges. Montreal, Quebec: Institut pédagogique Saint-Georges, Université de Montréal, 1939. Pp. 26.
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Educational News and Editorial Comment

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ATTITUDE OF TEACHERS TOWARD SUPERVISION

IN THE whole area of school administration few problems have been more difficult to solve than those of defining the purpose of supervision and of discovering procedures through which the supervisory function may satisfactorily be carried into effect. No small part of the difficulty lies in the fact that supervision, by its very nature, is almost sure to arouse emotional reactions more or less intense. The situation is all the more difficult where the supervisor attempts to rate teachers for purposes of promotion and at the same time undertakes to be genuinely helpful in promoting their professional growth. The rating function may operate to block the avenues to guidance. To do their best work, teachers, like all other persons, must have confidence; they must work in a situation which provides a reasonable degree of emotional security. In any situation involving human relationships, attitude is of primary significance. If supervision is to be effective, teachers must be sympathetic with its purposes and must have confidence in its procedures. Any program of supervision, both with respect to its objectives and its organizational arrangements, should be worked out, as far as is possible, in harmony with the attitude of the teachers who are to be supervised.

In this connection attention is called to a recently published monograph by J. M. Hughes, professor of education at Northwestern University. The monograph bears the title *The Attitudes and Preferences of Teachers and Administrators for School Supervision*. The purpose of the study was "to discover the attitudes and preferences of a selected group of educators including both teachers and administrators with respect to three phases of school supervision, first, the purposes; second, the functionaries who should effect these purposes; and, third, the kinds of activities to be used in effecting these purposes." Judgments were obtained from more than three hundred graduate students attending Northwestern University and the University of Minnesota. Of this number, fifty-five were administrators in charge of large high schools. Quantitative ratings were obtained on a list of purposes of supervision. Those making the ratings were asked to assign the value of one hundred to the purpose that they believed to be professionally the most worth while. A value between zero and one hundred was to be assigned to each of the other purposes listed. The purposes on which ratings were obtained were as follows:

1. To make provisions for securing adequate ratings on the teaching skill of teachers.
2. To make it possible for a teacher to receive from supervisory officers their opinions with respect to what outstanding personal and teaching weaknesses the teacher possesses.
3. To make it possible for a teacher to receive from superior officers constructive suggestions for improving the teacher's techniques of teaching.
4. To provide the teachers with expert help in improving the nature of the materials taught in a particular course of study.
5. To provide the teachers with expert help in their efforts to employ a particular method of teaching.
6. To afford active aid to individual teachers in planning and carrying out some educational project or undertaking which she is willing to engage in and the results of which promise to bring general professional improvement.
7. To give active aid to a group of teachers in planning and carrying out some educational endeavor the results of which promise to bring general professional improvement to those who participate.

Some notion of the values assigned the various purposes may be gained from an examination of the accompanying table.

Professor Hughes comments as follows on the attitudes of teachers and administrators with respect to the purposes of supervision:

Teacher rating as a purpose of supervision is assigned a very low value as is also making it possible for a teacher to receive from superior officers their opinions with respect to what outstanding personal and teaching weaknesses the teacher possesses. What the attitude of the profession is toward having superior officers rate teachers and indulge in the practice of giving negative criticism is emphatically shown here. Despite the strong antipathy for teacher rating, it is almost universal practice in city systems to employ it, and the legitimacy of its use is defended by the large majority of administrators. The unfortunate part of it is that constructive supervision is well-nigh impossible as long as teachers are rated and inspected because rating, inspection, and supervision are conflicting functions. No teacher is going to be her natural self in the presence of one whose function it is to judge her for promotional purposes. What is more unfortunate is the fact that most teachers view rating and inspection as practically the essence of supervision, and they look upon visitation as the activity best suited to the cause of inspection. Thus, rating, inspection, visitation, supervision come to be in the minds of teachers almost synonymous terms.

THE FREQUENCY WITH WHICH EACH PURPOSE WAS ASSIGNED
A VALUE OF 100 AND A VALUE OF 25 OR LESS

Number of Purpose	Number of Entire Group Assigning a Value of 100	Number of High-School Administrators Assigning a Value of 100	Number of Entire Group Assigning a Value of 25 or Less	Number of High-School Administrators Assigning a Value of 25 or Less
1	1	1	144	24
2	10	2	67	9
3	102	24	8	1
4	15	3	17	3
5	5	0	32	12
6	60	8	3	2
7	87	17	9	4
Total . . .	280	55	280	55

Space will not permit a presentation of the ratings with respect to the organization of supervision or types of activities deemed most desirable. We should like to conclude this statement with the suggestion that school administrators and teachers give Professor Hughes's study a careful examination. It may be purchased for fifty cents from the School of Education, Northwestern University, Evanston, Illinois.

EDUCATION MOVES FORWARD IN LATIN AMERICA

ERNESTO GALARZA has prepared for the Division of Intellectual Co-operation of the Pan American Union the second of two mimeographed bulletins under the title "Educational Trends in Latin America." These two publications serve the very useful purpose of making available in English an account of the many significant developments that are taking place in the educational systems of the Latin American states. The second bulletin covers the period between the spring of 1937 and the summer of 1938.

In previous issues of the *Elementary School Journal* we have commented on some of the major changes in educational policy which have been put into effect in Mexico. In order that this information may be brought down to date, we quote at some length from Galarza's account of recent trends in that country.

In spite of the steadily increasing federal appropriations, the six-year plan in education is slowing down. In 1934 the national budget provided \$8,446,000 for the nation's schools, a sum which was increased to \$16,028,000 in 1937, or an increase of nearly 100 per cent. During this period, however, 3,000 fewer schools were created than were called for by the program launched in 1934. Thousands of children have gone to school for the first time, especially in the rural districts, but it is estimated that there are still about 1,900,000 children of school age who are not receiving education of any kind. According to the most recent official estimates, it will be necessary to increase federal appropriations to \$26,000,000 a year by 1939 if this need is to be adequately met.

That this burden will have to be carried more and more by the national government is taken for granted. In the past, the local and state governments have co-operated by increasing their school budgets and by contributing labor and materials for the construction of buildings. More than eight thousand communities have erected schools in this way, and at least one state—Veracruz—at one time apportioned nearly 40 per cent of its annual income for education. State and local governments are expected to continue this co-operation, but not in proportion to the increasing need. Their total expenditures for school purposes during the next year are expected to remain at the present figure: \$3,780,000. Under these conditions, the Federal Department of Education will widen its control of the schools, a tendency which is favored by many as the only solution for the country's educational problems.

In the field of research, it is improbable that local initiative could match the resources of the national government, recently shown in the establishment of the National Psychopedagogical Institute, located in Mexico City. The institute is well equipped to carry on research in psychological measurements, administrative problems, curriculum construction, and vocational guidance. It will test

methods of instruction now in use and will advise the Department of Education on all changes of a technical character. Local and regional studies of school organization in relation to community needs have been undertaken, the first of which appeared early in 1938. These surveys, based on the co-operation of experts in various fields will provide for the first time a detailed analysis of the Mexican school, both as to its inner structure and as to its place in the social environment. A strong feature of the work of the institute is the proposal to subject new methods of instruction—projects, units of work, etc.—to laboratory tests before they are approved for general use.

Enrolment in the technical and vocational schools has grown steadily, partly because of the emphasis on the practical side of such work. Today there are nearly fourteen thousand students enrolled in these schools, or nearly as many as there are in the secondary schools, where the traditional course is followed. Expenditures for vocational and trade instruction amounted to \$1,917,000 in 1937, compared to \$612,000 in 1934. The National Polytechnic Institute, recently established, will prepare technicians through intense theoretical and practical training. They will be placed throughout the country in charge of schools for adolescents and adults. Already the curriculums of these schools have been simplified by the elimination of cultural subjects. Shops have been installed in the secondary schools of the traditional type, with the aim of familiarizing all students with the manual arts and of imparting some notions of vocational opportunities. . . .

Under the six-year plan, it is estimated that rural education will not reach its present goals until federal expenditures in this field reach \$30,000,000 a year. In 1937, these expenditures represented an increase of nearly 150 per cent over 1934 but were still considerably short of the maximum needed to build a school in every village. The original rural normal and central agricultural schools have been discontinued, and have been replaced by the regional peasant schools (*escuelas regionales campesinas*). The latter are pursuing a realistic program of teaching and teacher training, striving above all to bridge the gap between the technical character of modern agriculture and the limited means and psychological resistance of the Indian peasant communities. The success of the new policy can be gauged by the increase in enrolment in the regional schools, which rose from 1,273 in 1935 to 3,584 in 1937.

The rural educational missions, which have become justly famous, were placed for a time under the Autonomous Department of Indian Affairs, preliminary to their complete reorganization. This move, however, met with strong criticism, particularly from the members of the missions and from teachers' unions. They succeeded in having these mobile and highly trained units once more placed under the secretary of education. The confusion caused by these rapid changes was all the more unwelcome in view of the fact that the missions have recently launched a campaign to foster small industries in the Indian villages, a task for which they are especially equipped. . . .

Social-service activities in the elementary and secondary public schools have

become a characteristic of Mexican education. In 1937, 9,000 public schools maintained temperance committees; 7,000 had committees which co-operated with the government in its efforts to protect national resources, especially forests; 5,000 schools had child-welfare committees; and 503 schools had committees which had taken an active part in improving the water supply of towns and villages. Producers' and consumers' co-operatives exist in scores of towns and rural schools, which distribute food and medical supplies, working side by side with local and state relief agencies. Activities of this kind are fostered by a special bureau of the Department of Education, called the Technical Office of Educational Social Action.

How this unity of social and educational objectives works out can be illustrated by a number of examples. In the state of Querétaro, where opposition to the government's land-distribution program was strong, the elementary-school teachers constituted themselves advisers to the *cjidos* or agrarian communities, often at great personal risk. When the expropriation of foreign oil companies became the issue of the day, units of study and projects dealing with petroleum and its development as a national industry were immediately prepared. In this way both teachers and pupils became active and informed propagandists of the policy being followed by the government. Rising living costs have been studied by the schools, which have organized consumers' co-operatives of former students in order to spread information on the mechanics of distribution, price-fixing, retail selling, and purchasing. More than thirty of such co-operatives have been set up and united in a national co-operative federation. Courses offered on the principles of co-operative management include legislation, accounting, business, and merchandising practices. . . .

The national government has invited municipal and state governments, as well as labor and civic groups, to open secondary schools wherever possible. Federal authorities are ready to pay a small subsidy to such schools.

In March, 1938, it was announced that twenty-one kindergarten and nursery-school experts had been sent to various states to set up programs of preschool guidance. These specialists have begun to organize mothers' clubs, acquainting parents with the functions of the visiting teacher and the help they can receive from child-welfare centers. After a period of field observation, they will submit reports upon which will be based a nation-wide effort to establish the nursery and kindergarten as a part of the public-school system. Special arrangements of songs and rhythmic dances for the preschool child have been prepared under the direction of the well-known composer and conductor, Manuel M. Ponce.

HELP IN THE PLANNING OF FORUMS

DURING the past few years a great deal of practical experience has been gained with respect to the most effective ways to organize and carry on public forums. While he was superintendent of schools in Des Moines, Iowa, Dr. John W. Studebaker undertook to demon-

strate the management of a system of community-wide forums and, since becoming United States commissioner of education, he has vigorously championed the public forum as a means of cultivating in the adult population the social insights necessary to safeguard our democratic way of life. During the past three years 580 local communities, aided by federal emergency funds, have conducted public-forum demonstrations. In a recently published pamphlet Dr. Studebaker and Chester S. Williams, assistant administrator of the Federal Forum Demonstrations, undertake to make available, for school administrators, school-board members, and civic leaders, much of the experience gained in these demonstration centers. The pamphlet, entitled *Forum Planning Handbook*, is published by the American Association for Adult Education in co-operation with the United States Office of Education.

The following statement is quoted from the first chapter.

The authors have tried to put into brief and readable form that body of practical experience on which our agencies of public education may build permanent and growing programs for improved citizenship.

Behind the handbook are thousands of pages of reports, the described experiences of hundreds of American educators who have experimented with tens of thousands of school-managed forums, and the recommendations of educators and civic leaders engaged in the nation-wide program of demonstrations. Behind this handbook are records of some thirty-six state forum conferences conducted by the state departments of education.

Into these pages goes material based on many thousands of letters, thousands of columns of newspaper editorial comment on local demonstrations, and scores of magazine articles.

A valuable feature of the pamphlet is a list of selected references on forum organization and discussion leadership. The pamphlet may be obtained through the Federal Forum Demonstrations, Washington, D.C.

THE BIRTH-RATE AMONG CATHOLICS AND NON-CATHOLICS

IT is common knowledge that the small-family pattern has come to be adopted, to a greater or less degree, by practically all elements in our population. It seems to be generally supposed, however, that birth-rates are materially higher among Catholic than among non-Catholic elements in the population. In a recent article in the *Jour-*

nal of the American Statistical Association, entitled "Religious Differentials in the Net Reproduction Rate," A. J. Jaffe presents a body of data on the relative fertility of Catholics and non-Catholics. Mr. Jaffe reaches the following conclusions with respect to fertility among Catholics and Jews.

The evidence reviewed in this study (for the period 1920 to 1935) revealed no clear-cut differentials between the net reproduction rates of the Catholic and non-Catholic populations. In general, the Italian-born and the native-born of Italian extraction have higher rates than other groups. The Catholic Irish, Polish, and the groups of miscellaneous nationalities, on the other hand, have rates about equal to, or somewhat lower than, the rates of comparable non-Catholic groups.

The net reproduction rates of both the foreign-born and native-born Jewish populations, in general, tend to be somewhat lower than rates of economically comparable Protestant stock. This is especially evident in the data of the city of Chicago.

LONG DIVISION BY THE METHOD OF INSPECTION

A NUMBER of investigations indicate that there are a variety of methods by which ability to solve arithmetic problems can be improved. As Thiele¹ has pointed out, most of the research studies have been based on "the assumption that improvement in problem-solving ability is dependent upon the acquisition by the pupils of some sort of thought-pattern or technique of problem-solving." Some years ago Washburne and Osborne² reported a study which led them to challenge this notion that children should master some formula or specific technique of problem-solving. They came to the conclusion that "children who were taught no special technique of solving problems but simply solved many problems surpassed those who spent time learning a *method* of solving problems." More recently Thiele has reported two studies which bear out Washburne and Osborne's earlier conclusion and which lead him to inquire:

May we not argue further that, if children are left to make their own generalizations about problem-solving from repeated successful experiences, these

¹ C. L. Thiele, "A Comparison of Three Instructional Methods in Problem Solving," *Research on the Foundations of American Education*, pp. 11-15. Official Report of the American Educational Research Association, 1939. Washington: American Educational Research Association, 1939.

² Carleton W. Washburne and Raymond Osborne, "Solving Arithmetic Problems," *Elementary School Journal*, XXVII (November and December, 1926), 219-26, 296-304

generalizations are more valuable to them than the ready-made types which adults think they should make? If these conclusions are valid, the teaching of techniques of problem-solving in the lower grades should be discontinued.¹

From C. L. Sampson, principal of the Humboldt School at St. Louis, Missouri, we have received an account of a simple procedure in teaching long division which he finds works very successfully. Mr. Sampson believes that the trial-and-error method is not as effective as what he calls the "inspection method." We quote the following paragraphs from a statement submitted by Mr. Sampson.

There is a simple change that can easily be made with any class starting long division. This change is from the trial-and-error method to the inspection method. The following illustrations show clearly the mental processes involved in the use of this method. In the second illustration the quotient is to be carried to two decimals.

$$\begin{array}{r} 26 \\ 478 \overline{) 12828} \\ \underline{956} \\ 3268 \\ \underline{2868} \\ 400 \end{array}$$

$$\begin{array}{r} 26.84 \\ 478 \overline{) 12828} \\ \underline{956} \\ 3268 \\ \underline{2868} \\ 4000 \\ \underline{3824} \\ 176 \end{array}$$

If 3 is taken for the quotient factor, there will be 2 to carry from the product of 7, which added to 3×4 will be too large. The quotient factor is obviously 2. A glance will show that the next quotient factor cannot be 8. It can be seen that 7 will give 5 for the carrying figure, which is too large when added to 7×4 . Six is correct. If a case does not appear as evident, it may be necessary to consider another carrying figure to the right. The carrying figure should be given more rational treatment in the simpler processes that precede long division.

In the second example, if the next factor is 9, 6 must be added to the product of 9×4 . The trial dividend would be too large. Eight is therefore known to be the correct factor. As it can be seen that the next factor cannot be 4, but that 3 as a factor will leave a remainder larger than half of the divisor, 4 is approximately correct to the hundredths' place.

This inspection of the carrying figure has been used for three years in the Humboldt School in St. Louis. A test exercise was given to 249 pupils in Grades V-VII and was worked *in ink*. One hundred and eighty-nine pupils obtained 3,402 quotient factors without an error. The remaining 60 pupils had to make 123 corrections, for an average of 16 out of 18 quotient factors correct by inspection.

¹ C. L. Thiele, *op. cit.*, p. 15.

tion. The test was given without any previous notice or preparation or instruction.

This method of division brings the product facts into more precise relation to the system of numeration. Trial and error is contrary to the most distinguishing characteristic of mathematics, which proceeds or should proceed step by step from what is given to what is required. To proceed in this way with insight of meaning is purposeful practice instead of bond-forming drill. No attempt should be made to make long division automatic. . . . When pupils, *working together*, are given a chance to think for themselves, *on their own time*, there will be many surprises at what they *can* do. This inspection method secures accuracy by enforcing concentration; the mind is not so likely to wander off as when it is mechanically following a rule. G. F. Stout wisely counsels, "It is a mistake to look for the value . . . in a supposed ultimate achievement considered in detachment from the process of its attainment" ("Do Finite Individuals Possess a Substantive or an Adjectival Mode of Being?" *Life and Finite Individuality*, p. 145. Edited by H. Wildon Carr. London: Williams & Norgate, 1918).

There are other questions concerning the relation of process to numeration which, judged against the rigor of custom and the established habits of teachers, are radical. That this proposed change in dividing is not radical a little practice by a teacher or a supervisor will show. However, the pupil is the only one to be considered in this case.

THE STUDY OF THE COMMUNITY

SUPERINTENDENTS, principals, and teachers who are interested in making studies of their communities in order to become better informed with respect to the educational needs and resources will find particularly helpful a recently published bulletin of the Department of Public Instruction of Michigan. The bulletin is published under the title "Basic Community Survey." It is essentially a survey form for gathering worth-while information about the community. The form is divided into seven parts: "Community Maps," "Population," "Type of Community," "Economic Factors," "Community Agencies," "Community Problems and Planning," and "Supplementary Documents or Exhibits." The following statement quoted from the bulletin gives a general idea of the purposes that it is intended to serve.

The process of obtaining the following information and the information obtained should furnish a basis for servicing the following program:

A. For the pupil

1. To introduce the pupil to essential experiences, meanings, and understandings

- a) *By orienting the pupil to the social relationships and problems of the community*
 - b) *By providing opportunities to the pupil for useful co-operative participation in community activities*
 2. *To develop a composite picture of the human and physical resources of the community as a basis for intelligent participation in community life*
 3. *To interpret social behavior in the present culture pattern of the community*
- B. *For the teacher and for curriculum-planning*
1. *To understand better the pupil and his needs by exploring the environmental factors that influence him*
 2. *To determine the various relationships of community life and living in which the pupils do or may participate*
 3. *To interpret present patterns of social behavior in the light of earlier patterns from which the present patterns evolved*
 4. *To bring together for utilization the wealth of instructional resources that the community may offer*
 5. *To provide a psychological approach to the larger aspects of society through the study of the local social order*
 6. *To collect data that will serve as a basis for modifying the educational program upon the basis of the needs of the community and in terms of community improvement*
- C. *For the community*
1. *To improve the effectiveness of educational agencies by utilizing pertinent community data*
 2. *To discover the needs and problems of the community as a basis for a general plan and program of community improvement*
 3. *To discover and to develop ways and means for co-ordinating and unifying community action*
 4. *To discover through a study of the culture as a whole the basic criteria for the evaluation of instructional programs*
- D. *For the Department of Public Instruction*
1. *To provide a basis for more effective service to the local unit*
 2. *To present a composite picture of state-wide conditions and needs to be used in developing immediate and long-time state-wide plans and procedures*

The administrator should not consider the collection of data for this study his whole responsibility, although he has the final responsibility. If properly handled, it is excellent educational procedure and good public-relations policy to give the pupils, faculty, board of education, and public a share in the project.

Teachers and pupils should plan co-operatively for participation in the collection of data. Four hundred eighty-three schools made similar studies during the school year 1937-38. Many of them planned the study so that homemaking classes gathered data on home conditions; vocational classes gathered data on

occupations; commercial classes gathered data on types of business enterprises and volume of trade; social-science classes determined the scope of the community and gathered data on social agencies; mathematics classes drew maps, graphs, and charts.

A GUIDE TO BOOKS FOR TEACHERS OF THE SOCIAL SCIENCES

TEACHERS of social studies everywhere will be interested in a bulletin of the National Council for the Social Studies which has been published under the title *Bibliography of Textbooks in the Social Studies for Elementary and Secondary Schools*. The bulletin was prepared by a committee under the chairmanship of Wilbur F. Murra. The following paragraphs quoted from the Introduction indicate the general purpose and scope of the bulletin.

An amazing amount of thought and energy in recent years has produced an almost unbelievably large number of textbooks for use in the social-studies classes of American elementary and secondary schools. Probably no one person knows all of these books, and few are able to be well informed even in a restricted subdivision of the field. Less to be tolerated, however, is the fact that it is almost impossible to find out what books exist together with elementary data about them. Prior to the publication of this bibliography, the only list of the social-studies textbooks which could claim to be reasonably complete was that compiled some twelve years ago by Amabel Redman and published by the National Council for the Social Studies (*Classified Catalogue of Textbooks in the Social Studies for Elementary and Secondary Schools*). But this list has long been outdated.

The need for a new comprehensive list of social-studies textbooks has been felt for several years. It has been expressed particularly by teachers and school administrators concerned with schoolbook selection and by teacher-training institutions engaged in keeping abreast of current trends and in curriculum research. It is to be expected that teachers generally, even though not contemplating the immediate selection of a new text, will profit from a full bibliographical statement about the text or texts which they now use together with a list of all other titles in the given field.

This bulletin does not pretend to solve in advance the teacher's problem of textbook selection. It does not attempt to indicate what are the *best* books—or even the *good* books—in a given field. Rather, its intent is much more modest, namely, to tell what are *the* books. Teachers desirous of selecting a book to meet their particular needs will find help in the essay by William E. Vickery printed at the end of the bibliography in this bulletin and in the references there cited. It is the conviction of the committee which compiled this bulletin that no outside agency or individual, no matter how expert, can determine by blanket recommendations what book should be used by any particular class and teacher.

The problem of textbook selection is an important one, and the responsibility for solving it cannot well be evaded by the classroom teacher.

In addition to telling "what are *the books*" in each of the designated classifications, this bibliography attempts to give the following objective facts about each book listed: full title and subtitle; authors' full names; editors and collaborators; pagination; publisher; list price; date of latest edition; dates of all earlier editions, with variations in title and authorship noted; special editions and separately bound parts; supplementary materials such as workbooks, teacher's manuals, and tests; sequence and interrelationships of books in series.

Within these areas, no effort has been spared to make the bibliography as complete, accurate, and up-to-date as possible. It is hoped that no book properly falling within the scope of the bibliography . . . has been omitted and that all pertinent facts about each book listed have been given fully and accurately.

Part I is devoted to textbooks suitable for use at the elementary-school level. The subjects included are history, geography, and civics and fusion. The second part lists books designed especially for Grades VII-IX, under the following classifications: American history, geography, civics (including economic citizenship), and fusion. The third part contains a list of textbooks written primarily for senior high school pupils. These textbooks are classified by subject: American history, world-history (including ancient, mediæval, and modern history), English history, economic history, geography, economics, sociology (including social psychology), government, problems of democracy, and the Constitution. A valuable addition to the bulletin is a chapter giving suggestions for selecting a social-studies textbook.

The bulletin may be obtained for fifty cents from Howard E. Wilson, secretary-treasurer of the National Council for the Social Studies, 13 Lawrence Hall, Harvard University, Cambridge, Massachusetts.

THE PHI DELTA KAPPA LECTURES AT THE UNIVERSITY OF CHICAGO

THE local chapter of the Phi Delta Kappa fraternity at the University of Chicago has initiated a series of lectures dealing with important issues and problems in American education. The plan calls for a lecture each summer by some outstanding American or European scholar. The expectation is that these lectures will be published annually in an autumn number of the *Elementary School Jour-*

nal. The lecture for 1939 was given by William Fielding Ogburn, Sewell L. Avery distinguished service professor of sociology at the University of Chicago. We are pleased to present Professor Ogburn's lecture, "Future Trends in Education," in this issue of the *Elementary School Journal*.

WHO'S WHO FOR OCTOBER

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FUTURE TRENDS IN EDUCATION¹

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I WANT to begin by emphasizing the motif of the lecture this evening as dealing with the future because I want to turn your views forward and engage in what might be called projection. Perhaps many of you think the future is unknown, that a sort of veil or mist shrouds the vision and cuts it off. To a certain extent that is true, yet it seems to me that the future is not wholly unknown. Some things we know almost intuitively; for instance, no research is necessary to predict that during the immediate future we shall be speaking the English language in this country rather than Japanese or German.

On the other hand, we must make a careful statistical study before we can say that during the next twenty or twenty-five years the average expectation of life in this country will be between sixty and seventy years. We can certainly say that the business cycle will continue to give us depressions and periods of prosperity, but we are unable to say when the present depression will end and when the next period of prosperity will begin. We are not able to say when the next war will take place or what will be the outcome. Predictions must be viewed in terms of probabilities, some things can be foretold with considerable accuracy and some not at all. This means that I cannot deal with every important phase of education and make a serious guess about the future, but there are some things about which I think I can make a fairly reliable statement. That is what I shall attempt tonight.

One of the ways in which we can look ahead is to project trends. Any social institution, such as the school, goes forward partly on its

¹ The first of a series of annual summer lectures sponsored at the University of Chicago by Zeta Chapter of Phi Delta Kappa. This lecture was delivered in Mandel Hall on the campus of the University on July 12, 1939

own steam, but it is also influenced by forces outside which impinge upon it. I come to you from the field of sociology, hence as I see them, most of the forces which will direct education will come from outside the field of education proper.

The first significant trend I want to mention has to do with school attendance. We know that the birth-rate has been declining for half a century, and we are reasonably sure that it will continue to decline for some years. It is very likely that some twenty-five or thirty years hence the population of the United States will begin to decrease. Such a trend is certain to have some influence on school attendance. Indeed, the influence is already evident in the enrolment data for many schools. We can, therefore, predict that there will be no rapid increase but rather a decrease in the number of pupils in the elementary schools. This decrease will probably lead to a decrease in the number of teachers in the elementary schools.

Whether this trend will affect the high schools is a question. It produces a reduction in the number of elementary pupils because nearly all children of elementary-school age are in school. Only about 65 or 70 per cent of children of high-school age are in high schools. I think it was only about ten years ago that 40 per cent were in high school. Since there is such a possibility of increase in the proportion of persons of high-school age who attend school, we feel that the diminution in attendance in the high school will not be so noticeable for a time as it is in the elementary school now.

A smaller percentage of college-age people go to college. If, however, a large proportion, some 90 per cent or more, of the persons of high-school age go to high school, it seems probable that we shall have an increase in college attendance. Such a trend suggests some interesting possibilities. One that occurs naturally to sociologists as well as to economists is the question of whether college and high-school graduates will be able to find jobs that are appropriate to their qualifications and preparation. It is quite apparent that there will not be enough white-collar jobs for all the graduates; many will take jobs that are not white-collar jobs. I think this possibility is not necessarily a matter to be regretted. I am not sure there is any reason why plumbers should not enjoy the fine pleasure of discussing

Aristotle as well as do professors of philosophy and teachers of education.

Another aspect of school attendance which may be noted is the attendance of children at younger ages. Formerly we never heard of anyone going to school before six years of age; sometimes they did not go until nine or ten or even older. The Census of 1930 tells us that one in five children who were five years of age were going to school. It is quite probable that we may have an increase in attendance in the earlier age groups. One cause may be the percentage of mothers who are employed outside the home. One in eight or nine married women in the Census of 1930 reported themselves as gainfully occupied. At the beginning of the century this proportion was one in twenty-two. Quite possibly, the future ratio may be one in four or five. That force may operate to put children in schools at early ages, although this result is not likely to occur suddenly because of the cost to the taxpayer of providing for this increase.

I am brought to another point which buttresses this prediction. Schools in the future are likely to give more attention to what we call the personality of the pupil, in addition to the training of the intellectual virtues and the intellectual capacities as such. With college students *personality training is almost a hopeless task because their personalities are already formed, and only a violent shock can change them. Hence this training is not a probable development in college, but it is quite a possibility in the lower schools, particularly for the younger children. Again I get my basis of estimation from a force outside the school.*

Some centuries ago the personalities of children were shaped largely by three institutions: the family, the church, and the village or community. It is my observation as a sociologist that these three institutions have suffered a decline in the past one hundred or two hundred years. As they have declined, their power over the development of personality has diminished. The function of developing personalities is tending to leave the church, the village, and the home, and pressure is being brought by the home for the schools to take up this function. I have often talked with parents about schools and where to send their children, and I cannot remember the parent who was tremendously concerned over pedagogical methods as such.

They were much more concerned over such questions as personal relationships, the racial elements in the student body, the athletic situation, the social customs, dancing, fraternities, drinking, and the size of the student body. All these, it seems to me, concern personality. If the parents have anything to do with it, I believe the schools will be forced to undertake to do what they can for personalities.

I do not believe the influence of the family on personality will ever entirely disappear, but certainly there is a pressure for this function to be shifted in part to the schools. My thought is that this shift will continue during the next half-century. I think that the schools will be reluctant to assume this increased responsibility. It is too big a task, which they will not undertake voluntarily; but I think they are going to be forced to undertake certain steps. How they will do it is, of course, a question.

The classroom as such is by no means the best instrument or the best locale for training personalities. There is much better opportunity outside the classroom. Schools in small communities; schools that have playgrounds; extra-curriculum activities that utilize the school buildings for other purposes than training in the three R's; schools that hold dances, debates, and athletic contests—all offer better opportunities for personality training. The school personnel who have the greatest influence on personality are the coaches, the trainers, the deans, and the individuals who deal with extra-curriculum activities. The new demands placed on the school will cause these activities to be expanded.

With regard to the curriculums of the schools I do not know that any statement I make on this subject has a high degree of possibility and soundness. Certainly the trend of curriculum revision at the present time is in the direction of practical, utilitarian courses; and I should think that the demands of the social and the economic institutions upon the schools would be for further development of the curriculum along these lines.

I realize that this great question of what is and what is not utilitarian depends on your viewpoint. All courses are utilitarian in a sense, some immediately practical, others ultimately so. It seems to me we overemphasize tradition in regard to the academic cur-

riculums. I can illustrate this point by reference to a description of village life in India. The social and the economic conditions of Hindu village life are deplorable. The use of fertilizer for cultivation of land is unknown. The soil is nearly worn out. The natives live on very inadequate food, polished rice, and send away their wheat to pay the interest on their indebtedness. They represent benighted and ignorant agricultural conditions. In one of the schools established by the British, the youngsters were found engaged in memorizing the names of the Plantagenet kings of England. There is a certain parallel to this situation in our college and high-school curriculums. It would seem that the practical forces of life are likely to take away the lag of curriculums and to bend them in the direction of more practical utilitarian courses.

Furthermore, I think the schools are likely to be more efficient in the future. The efficiency movement is spreading throughout all our social institutions. It is centered in the movement for scientific management in industry, but it is spreading to political institutions. The various record-making devices and studies of management are all focused in that direction. I think that the efficiency movement in schools will be encouraged by the infiltration of the efficiency movement from outside into the schools.

There are actually two schools in two cities that may be compared from the point of view of efficiency. If you start a boy to school in City A and his twin brother in City B, the school systems are so organized that the graduate in City A would enter the Junior class at college at the same time the graduate of the school in City B would be entering the Freshman class. The boy in City A would have just as much information and training and would have gone over the same books and material as his brother in City B but in a shorter time. In City A this result is achieved largely through co-ordination of the curriculum. It illustrates something of the possibilities of an efficient system.

There is one other aspect of this efficiency movement that seems to me likely to develop in the future, namely, the lessening of the inequalities that exist in education. Again referring to trends outside education, we can see a strong movement throughout the United States for establishing a minimum below which any institution or

any individual is not allowed to fall. This movement is manifested in the advances made with regard to maternal health, childbirth, old-age pensions, social-security measures, and the like. The tendency is to spread the accumulated benefits of the more favored of our communities and citizens to the less favored ones. That movement is already well under way in education and seems likely to operate to raise standards which are rather low in less favored communities. Inventions and improvements in transportation and communication have broken down isolation and have brought opportunity to remote regions by enlarging the unit of administration.

Now I turn to another trend which is interesting to the student of sociology, namely, the accumulation of culture and the growth and magnitude of civilization. There was a time in society when the old man of the tribe knew practically everything in the way of history and knowledge that existed in regard to the tribe. The most recent example in our own culture was Herbert Spencer, who wrote authoritative books, the best of his time, in the fields of education, philosophy, biology, geology, sociology, economics, etc. There will never be another who will know it all because the amount of knowledge is too great and accumulates too rapidly. This great accumulation of knowledge raises another question: How can the school pass on this tradition, this vast amount of knowledge?

One of the thoughts that come to mind is that something might be done to prolong the period of schooling. Many years ago John Fisk developed a theory called "the prolongation of infancy." It is quite interesting to see how long infancy may be prolonged by the school system. When I was a young man in an agricultural civilization, a man was supposed to be a man at twenty-one and a woman a woman at eighteen. Now we refer to some man who enters the graduate school at thirty as a youngster. A student who is graduated from college at twenty-two, spends three years in law school or three or four years in medical school, and then lives through a "starvation period" of several years for the lawyer or two years' internship in a hospital for the doctor, really gets started on his career rather late in life. Prolongation of infancy of this sort is one way in which we can adjust to this accumulated knowledge. I think this trend will continue.

Another method of adjustment is to develop specialization. This tendency is already evident in many fields. For example, there is the field of genetics, which is a branch of zoölogy, itself a branch of the biology about which Spencer wrote one of his volumes. A geneticist is sometimes unable to read the papers of another geneticist because the language is so technical. This example could be duplicated in many other fields. Specialization is likely to go forward and is likely to lead to specialized schools. It is certainly one way by which society may adjust to this accumulated body of knowledge.

I would like to predict here that there will be many other educational institutions besides the schools. This prediction really indicates a changing concept of education, a notion broader than that of the behavior which occurs in the schoolroom. In a changing society like ours there is something of a tendency for the concepts to change because the underlying social conditions are changing. But we are extremely conservative: we resist simplified spelling, a change in our system of measurement, and modification of linguistic conceptions. Education should, in the course of time, overcome this inertia and develop new meanings. The word "art" is undergoing a redefinition today, as is the word "education." We think of art as classical art, that is, painting, sculpture, and music, but Gilbert Seldes has written a book on the seven lively arts in which many phenomena such as vaudeville, motion pictures, and radio are included as art. Why may not photography be art as truly as painting? The changing aspects of life are infusing new meanings into old concepts.

Link, in his book *Return to Religion*,¹ suggested that we should be better off as a nation and that our students would be better off as students if they would abandon one year of college and substitute therefor one year in the C.C.C. camps. Link considers the C.C.C. camps as educational institutions. Similarly, we may classify the Boy Scouts and the 4-H Clubs as educational.

This infiltration of new meanings into education may be observed in Germany at the present time. The Germans know specifically what they want in education, be it right or wrong. They see clearly the young German type that they want to turn out, and they do not consider the schools as the only educational agency which is to mold

¹ Henry C. Link, *Return to Religion*. New York. Macmillan Co., 1936.

this product. Their institution known as the *Arbeitsdienst*, similar to the C.C.C. camps, is among the agencies utilized for that purpose. We cannot overlook the possibilities of other institutions as educational agencies. Today we have a population in which everyone reads and writes. Soon we shall have a population in which everyone has at least a high-school education.

With a change of technique there are possibilities of spreading certain types of education widely through the different communication inventions and agencies. I can see that the radio might become quite an institution of an educational sort. Indeed, the radio news commentator now exerts something of an educational influence in civilization and in social science. Magazines certainly qualify in that regard. They have a definite role in extending educational influence in a community. I am impressed with the possible agencies of this kind. I think the movie is already educating us in ethics and manners and broadening our knowledge about customs and current events by serving somewhat as the equivalent of travel. It also teaches some history.

There are also possibilities in facsimile transmission---a device which prints bulletins or newspapers. The machines are not particularly costly. I saw one of them at the San Francisco Fair print a sixteen-page newspaper in an hour and a half. Think what might be done with correspondence courses.

The specialization of newspaper columnists is interesting. Some of the columns today may be the equivalent of a lecture on political science. Other columns contain much valuable advice on the subject of health and disease.

Thus I think you are likely to find a certain increase and extension of what I would call educational institutions. As the family, the church, and the village lost these functions, they have been taken up by the schools, newspapers, magazines, forums, and various clubs and societies.

One may also predict wider use in the schools of some of the newer inventions. It is easy to see that an invention is first adopted in order to make a profit for the manufacturer. To schools a new invention means expenditure of money, with no saving or profit. Hence business adopts new inventions before the schools do. It is likely

that the business world will take up television quicker than will the schools because such innovations on the part of the schools require additional money from the taxpayers. There seems to be a lag in adoption of these newer devices by the schools, and for that reason we underestimate the potentialities of these instruments.

Television will have great use in the future in the schools. It certainly is a marvelous instrument for orientation in current events, politics, and economic science. The radio will be used more. In fact, the schools may have to abandon some of the traditional classroom instruction for other methods.

Educational motion pictures have been developed to a considerable degree. Another important invention is the mechanism for making a film book. This device is very cheap. About four hundred pages of typewritten material can be photographed for about a dollar, and I am told that it will be possible to produce the required number of copies of a Doctor's dissertation for about fifteen dollars. The apparatus for projecting the film is also simple and inexpensive. I believe this device is certain to be used widely to great advantage in educational institutions.

There is another invention I have often speculated about. It is the talking book, which was suggested to me a number of years ago by an advertisement offering for sale a phonograph record that would run for thirty minutes. Certain speeches and lectures were available. As I thought about it, I could see possibilities of using this device in education. Suppose you were the president of a small college and could get a set of lectures in philosophy delivered by Whitehead, Dewey, and Bertrand Russell. Why engage any local talent when such distinguished philosophers are available through this new medium? This is just one of the possibilities; there are many others, but I do not wish to let my fancy go too far.

There is one more point I would like to make before I close. Changes in the political organization are taking place at the present time which seem to me to be of profound significance for the schools. I have talked about changes in the family, village, industry, and in various other institutions, but I have not said much about government. What is happening is that government is being united with business, and we are moving in the direction of the totalitarian state.

Government is becoming a much larger institution and is touching our lives in more ways than it used to - paying checks to farmers, taking care of aged and unemployed, furnishing work and relief. It is telling workers that they can unionize, telling employers what they can and what they cannot do with regard to labor.

As government expands and touches our lives in more and more ways, it is evident that politics and political matters become more important. They are going to reach out and try to control our activities. I think that they are likely to try to dominate, or at least to exercise influence over, the curriculums of the schools. Not long ago the legislature of a neighboring state passed an act requiring all schools to teach all the pupils the virtues of cheese. If it is possible to put cheese into the curriculum, we don't know what else may be slipped in. Propaganda has made tremendous strides since the World War, partly as the result of inventions, such as the radio, and of improved methods in advertising and printing. The average American believes that he thinks his own thoughts and that he plans his own actions and does not need anyone to tell him what to do. But propaganda is subtle; its ideas filter in in all sorts of ways and its possibilities are tremendous.

I am concerned over the potential dangers from government because of what has taken place in Europe. In the Fascist and the Communist states there has been the most bitter strife between the church and the state over the control of youth. The dictators knew very well that the foundations of their social order would be insecure unless they had control of the youth. Consequently they have developed organizations to insure this control.

I was impressed by what a friend of mine from China told me the other day about the word "propaganda." Over there they call it "thought control." They realize that it is a device for controlling thought. It would be a serious matter if we did not maintain freedom with regard to what is taught to children. An important step in putting propaganda into the schools is likely to spring from patriotic organizations, which may attempt to influence legislatures to pass laws requiring youths to take oaths of loyalty to this or that. They may make their influence felt by censoring textbooks and by requir-

ing propaganda to be incorporated in textbooks. This matter is serious and surely one to be watched carefully.

It is said that the requirement of a good speech is that the speaker should close on an optimistic note. I have mentioned a good many optimistic predictions in my remarks. I am sure you would think it unrealistic if I predicted nothing but good things because I would be giving you an example of wishful thinking, which is the greatest obstacle to successful prediction. If, however, you do not like the things I have predicted, I would like to make this reservation: that, because of the element of human will-power, it is never as easy to predict events of human behavior as it is to predict the movements of astronomical bodies. If you think some of my predictions unwise or undesirable, then it is up to you to change these trends and to bend your efforts to avert the occurrence of the undesirable courses which I have predicted.

PROBLEMS OF RURAL EDUCATION IN THE UNITED STATES

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RURAL EDUCATION THE CRUCIAL AREA IN THE COUNTRY

THE phenomenal concentration of population in urban communities during the past few decades has tended to obscure the importance of rural education in the national life. It is perhaps not generally known that approximately half of the nation's children attend rural schools and that many more than half of the nation's teachers teach in the open country or in villages. It is a fact of far greater importance that a large fraction of the nation's children are growing up in what have been designated as rural problem areas—areas characterized by unusually high birth-rates, by an intense pressure of population on the resource structure, by a large acreage of marginal and submarginal farm lands, by low levels of living, and by the existence of a large percentage of the population unable to carry their own economic weight in periods of economic stress. A comparison of the number of children living in these problem areas with the number living in certain other regions reveals the magnitude of the educational task in these areas of restricted economic opportunity. Twenty-five per cent of all children seven to thirteen years of age live in rural problem-area counties, 28 per cent live in the rural and the urban non-problem areas of the Northeast (including New England, the Middle Atlantic states, West Virginia, and Maryland), 24 per cent live in the rural and urban non-problem areas of the middle western states, and only 5 per cent live in the entire Far West.

The problem of providing a reasonable degree of equality of educational opportunity in the United States is essentially a problem of improving the educational opportunities afforded rural youth. A large portion of rural children attend one- and two-room schools.

They are taught by teachers markedly less well qualified than teachers in urban schools. In 1936 rural teachers received, on the average, a salary of \$830; in the same year urban teachers were paid an annual salary of \$1,820. Expenditure per pupil in average daily attendance in 1936 was \$99 in the case of the urban child and \$61 in the case of the rural child. Rural children, moreover, attend school on the average about twenty days less each year than do urban children. In the great majority of rural schools the curriculum is sorely in need of revision to meet the conditions of modern life; instruction may still be characterized as being, in the main, drill in the three R's and rehearsal of textual materials. Library facilities are commonly inadequate or do not exist at all. Finally, great inequality exists between high-school and junior-college opportunities afforded rural and urban youth.

FACTORS CONTRIBUTING TO INEQUALITIES IN EDUCATIONAL OPPORTUNITIES

Many factors, of course, contribute to the inequality of educational opportunity in the United States. One of the most important of these is the differential in fertility between the urban and the rural populations and the resulting imbalance in the distribution of the educational load. For more than a century birth-rates have been much higher in agricultural than in urban communities. Throughout the United States, as a rule, birth-rates rise by sharp steps as the size of the community grows smaller. In 1930, in the rural-farm population fertility among native white women was about 62 per cent greater than necessary for family replacement. In contrast, in the total urban population fertility among native whites was below what was required to maintain the population permanently by 13 per cent, and in cities of 500,000 or over by as much as 22 per cent. These differences in birth-rates mean that economically productive adults in the rural population have a heavier burden of child nurture and education than have adults in the urban population. Table 1 shows clearly the unequal distribution of the educational load between the rural and the urban populations of the various regions and states.

The relative ability of a community to support education is determined in part by the number of children of school age for whom each

TABLE 1
CHILD POPULATION RELATIVE TO ADULT POPULATION IN RURAL-
FARM, RURAL NON-FARM, AND URBAN COMMUNITIES AND IN
CITIES OF 100,000 AND OVER, BY REGIONS AND STATES*

REGION AND STATE	NUMBER OF CHILDREN 5 TO 17 YEARS OF AGE PER 1,000 ADULTS 20 TO 64 YEARS OF AGE			
	Rural- Farm	Rural Non farm	Total Urban	Cities of 100,000 and over
Northeast	590	468	389	364
Maine	533	467	400	.
New Hampshire	442	416	419	.
Vermont	542	436	385	.
Massachusetts	510	429	399	380
Rhode Island	483	443	431	406
Connecticut	511	447	431	413
New York	494	392	352	347
New Jersey	507	432	408	413
Delaware	573	403	386	386
Pennsylvania	642	583	431	381
Maryland	636	476	377	373
District of Columbia . . . . .	.....	.....	274	274
West Virginia	767	652	432	.....
Middle States	578	460	368	346
Ohio	565	481	377	362
Indiana	554	457	374	347
Illinois	553	448	356	341
Michigan	609	475	390	366
Wisconsin	610	452	383	353
Minnesota	598	475	380	351
Iowa	557	420	375	353
Missouri	583	459	318	290
Northwest	612	479	308	301
North Dakota	681	544	430	.
South Dakota	620	484	409	.
Nebraska	585	440	384	355
Kansas	573	426	387	382
Montana	560	476	370	.
Idaho	656	503	456	.
Wyoming	546	432	387	.
Colorado	628	491	355	314
Utah	806	675	519	459
Southeast	791	558	408	363
Virginia	779	585	404	366
North Carolina	875	622	476	.
South Carolina	936	641	487	.
Georgia	837	517	424	373
Florida	722	491	374	360
Kentucky	732	593	372	336
Tennessee	723	569	383	356

* Data from Fifteenth Census of the United States, 1930: Population, Vols II and III.

TABLE 1--Continued

REGION AND STATE	NUMBER OF CHILDREN 5 TO 17 YEARS OF AGE PER 1,000 ADULTS 20 TO 64 YEARS OF AGE			
	Rural-Farm	Rural Non farm	Total Urban	Cities of 100,000 and Over
<i>Southeast--Continued:</i>				
Alabama	824	542	424	386
Mississippi	735	452	386	.. . . .
Arkansas	730	509	394	.. . . .
Louisiana	767	543	393	370
<i>Southwest</i>				
Oklahoma	720	519	396	350
Texas	749	551	392	322
New Mexico	710	495	394	359
Arizona	715	622	476	.....
<i>Far West</i>				
Nevada	693	490	403	.. . . .
Washington	491	385	298	266
Oregon	432	336	286	.. . . .
California	533	415	327	307
	501	410	312	292
	469	370	290	253

thousand adults in the most productive age group must provide the necessary means of care and education. It is determined in part, too, by the relative number of aged dependents in the population. It is a significant fact that the economically productive population in rural areas has to provide for a disproportionately large number of older persons. For the United States as a whole, the number of persons sixty-five years of age and over per 1,000 persons of twenty to sixty-four years of age is as follows for communities of different sizes: urban, 85; rural non-farm, 124, rural-farm, 108.

Rural America is carrying a disproportionately heavy educational load. It is also true that the rural population, especially the farm population, is receiving a disproportionately small part of the total national income. In every major region of the United States except the Far West, the farm population is carrying a percentage of the nation's children far in excess of the percentage of the national income which it receives. In both the Northeast and the Northwest in 1930 the percentage of the nation's children for which farmers had to provide was twice as great as the percentage of the national income

which farmers received. In the Middle states and the Southwest the ratio of farm children to farm income was three to one. When the educational load, as measured by the number of children to be educated, is considered in relation to economic capacity, as measured by income, the farm population of the nation carries an educational load four and one-half times as great as that of the non-farm population. In 1930 income per child of school age in the non-farm population was \$3,795; in the farm population it was only \$854. In other words, for every \$1.00 of income behind the education of a farm child, there was \$4.44 behind the education of the non-farm child. The income per child of school age in the farm and the non-farm population was as follows for the various regions: Southeast, farm \$474, non-farm \$2,055; Southwest, farm \$877, non-farm \$2,723; Northeast, farm \$1,326, non-farm, \$4,478; Middle states, farm \$890, non-farm \$3,967; Northwest, farm \$1,207, non-farm \$2,885; and Far West, farm \$3,480, non-farm \$4,941.

The unequal distribution of the national income between the farm and the non-farm population is due in part to the fact that the economic system operates to bring income into the hands of individuals and areas other than the individuals and the areas that produce it. Manufacturing in this country is highly centralized in a relatively few important industrial areas. In 1933 no less than 70 per cent of the wage jobs in the manufacturing and mechanical industries were supplied by the great industrial belt comprising eleven states and extending from southern New England through the Middle Atlantic states and westward beyond the Great Lakes. Two hundred industrial counties provide approximately three-fourths of all industrial employment.¹

CONTRIBUTIONS OF RURAL TO URBAN AREAS

Rural America makes substantial economic contributions to these areas of industrial concentration. It constitutes what may be considered a vast colonial hinterland to the great industrial belt: it supplies the industrial cities with raw materials to be fabricated, it rears

¹ Carter Goodrich and Others, *Migration and Economic Opportunity*, p. 319. Report of the Study of Population Redistribution, Industrial Research Department, Wharton School of Finance and Commerce. Philadelphia: University of Pennsylvania Press, 1936

and sends forth a constant stream of young adults to keep the ranks of labor filled, and it consumes a large part of the output of industry. This rural hinterland is characterized by an extractive economy; it is continuously mining its resources of soil, timber, and minerals. It is, by and large, a debtor economy; it lacks accumulated capital to fabricate its own products or to develop its own resources. When industrial development takes place in this rural hinterland, it is likely to be financed by outside capital, and a large part of the profits, if any, are drawn off to the communities in which the capital is owned. Through interchange of raw products and fabricated goods, income produced in these areas flows in no inconsiderable volume to areas of industrial concentration. To meet the "trade balance" between country and city, the rural population redoubles its efforts in the exploitation of natural resources and the process of depletion is accelerated. However abundant the natural resources of rural areas, whether of soil, timber, or minerals, so long as these areas operate as an extractive economy they face the problem of resource exhaustion and depletion.

There are other channels through which wealth is transferred from rural to urban communities. Baker comments as follows on the contribution which farmers make to the prosperity of villages, towns, and cities:

If it costs \$2,000 to \$2,500 (at predepression prices) to rear and educate the average child on American farms to the age of fifteen, when he may be assumed to be self-supporting (and \$150 a year does not seem an excessive estimate of the cost of food, clothing, medical services, education, and all the incidental expenses), the 6,300,000 net migration from the farms during the decade 1920-29 represents a contribution of about \$14,000,000,000. This contribution is almost equal to the value of the wheat crops plus half that of cotton crops during these years.

Nor is this all. When the farmer and his wife grow old and die, the estate is divided among the children. During the decade 1920-29 about one-fifth of the farmers and their wives died, and their estates were distributed among the children. One-third or more of the children had moved to town, and many of those children who remained on the farm had to mortgage it to pay the brothers and sisters who lived in the cities their share of the estate. A rough estimate indicates that between \$3,000,000,000 and \$4,000,000,000 was transferred from the farms to the cities and villages during the decade 1920-29 incident to the settlement of estates.

Although it is not intended to draw up a balance sheet of rural-urban con-

tributions, it is worthy of note, in passing, that there are great movements of farm wealth to the cities in addition to those incident to migration. Interest on debt paid to persons other than farm operators amounted to about \$7,500,000,000 during the decade 1920-29, and rent paid to persons other than farm operators amounted to about \$10,500,000,000. These payments are of a different character from the movement of wealth incident to migration, but there can be little doubt that portions of these payments were for the use of capital that had been previously transferred to the cities as a consequence of migration. The total of these interest and rent items is only a little greater than that represented in migration, including the wealth that flowed to the cities in the settlement of estates. The total movement from these four sources appears to have been about \$35,000,000,000 during the decade, or \$3,500,000,000 a year, which was about one-third of the average annual gross income of all farmers during the decade.¹

Estimates of this kind are, of course, only approximations, but, even after allowances are made for margins of error, they reveal something of the magnitude of the contribution of the farm to the wealth of the city. This contribution accounts in no small measure for the differences in the ability of the farm and the rural non-farm populations to support adequate programs of public education.

CONCLUSION

It may be repeated, then, with emphasis, that the problem of providing a reasonable degree of educational equality in the United States is primarily a problem of improving the educational opportunities of rural youth. The welfare of urban and rural areas alike depends in no small measure on the prompt and equitable solution of this problem.

¹ O. E. Baker, "Rural and Urban Distribution of the Population in the United States," *Annals of the American Academy of Political and Social Science*, CLXXXVIII (November, 1936), 271-72.

THE MEASUREMENT OF SOCIAL MATURITY IN CHILDREN

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THE literature reveals that most instruments developed for the measurement of social maturity apply generally to all age levels or specifically to age levels other than that of the primary-grade child. No adequate measures designed specifically for primary-grade use are available. The present research attempts to contribute directly to this age level.

STATEMENT OF THE PROBLEM

Helping children to become adjusted to one another is one of the most important problems which confront the school today. In the accomplishment of this aim educators realize the need for a sympathetic and an unbiased understanding of child behavior. This research is an attempt to assist teachers in their understanding and direction of the primary-grade child. It is the account of the development of a rating instrument for the measurement of social maturity in Grades I, II, and III.

If it is true, as some evidence indicates, that social traits change from one age group to another,¹ studies must be made extending over two or three years of development in order adequately to ascertain growth during childhood. The research reported in this article focuses attention on the primary-school period, not only because of the priority of the period, but also because of the limited amount of study which has been made of the social characteristics of primary-grade children.

¹ Esther Van Cleve Berne, *An Experimental Investigation of the Social Behavior Patterns in Young Children*. University of Iowa Studies in Child Welfare, Vol. IV, No. 3. Iowa City, Iowa: University of Iowa, 1930. Pp. 88.

DEVELOPMENT OF AN INSTRUMENT FOR MEASUREMENT
OF SOCIAL MATURITY

For purposes of this study "social maturity" is defined as that growth and development of the individual, conditioned by both internal and external factors, which enables him to adapt himself successfully to his fellow-men and to adapt his fellow-men to himself.

This research logically began with an attempt to discover the constituents or the component parts making up social maturity at the primary-grade level. These constituents are later referred to as patterns. Whether or not these patterns exist entirely separate, one from another, they serve as a convenient way of classifying social behavior.

Samplings of child experiences were arranged in a rating instrument measuring each pattern. The following criteria must be met if such an instrument is to be most useful: (1) It must be stated in terms most significant to the rater. (2) It must be stated in terms representing concrete types of behavior. (3) It must be stated in such a way that the individual will be accurately rated, not merely compared with the behavior of other children in his group. (4) It must measure all phases of social behavior in the child. (5) Each statement must set forth a desirable accomplishment. The advantage of a rating instrument conforming to these criteria can readily be seen. It takes on an aspect of objectivity, and at once the rating becomes easier and more reliable than it would be if the rating did not meet these criteria.

No single approach was wholly relied on in the study of the children used in this research. One method led to another. Of necessity there was overlapping. There were, however, an organization and a unity of material so that ultimately there evolved a listing of patterns which were checked against subjective judgment. For the most part the following techniques were used in the order given: (1) observation of children working and playing together, (2) specific observation of children selected because of their adjustment or their lack of adjustment in social traits, (3) interviews with primary-grade teachers, (4) informal interviews with primary-grade children, (5) analyses of studies conducted by other research workers, and

(6) criticisms of the selected constituents of social maturity by public-school teachers and principals. That the investigation should have begun with the observation of children is significant because there were no preconceived notions or ideas concerning the final classification of patterns.

Two hundred and seventy primary-grade children were used as a working basis for the selection of these patterns. Fifty-five were studied individually by the method of observation or interviews with the children and in some cases by both methods. Studies were sometimes supplemented by interviews with the children's teachers.

PATTERNS OF SOCIAL MATURITY

The following list represents the patterns of social maturity under which, according to the results of the six techniques used, all primary social behavior may be classified:

1. *Group compatibility*.—Is able to get along congenially with varied groups of children; is companionable, conversable, communicative, and fond of mingling, talking, and working with others.

2. *Kindness and sympathy*.—Is kind in actions toward others; has a mutual feeling of pleasure or pain; regards the comfort and the interest of others before his own.

3. *Efficiency*.—Achieves high standards and shows a genuine effort to give of his best in work or play.

4. *Fair play*.—Behaves in a manner generally acceptable to social standards; does not endeavor to obtain credit due others; shows a sportsmanlike attitude in school and on the playground; respects the rights of others

5. *Emotional adjustability*.—Has a feeling of security and manifests adequate ways of emotional release.

6. *Courtesy and politeness*.—Is considerate and thoughtful of others; conforms socially with the customs and traditions of the race.

7. *Dependability*.—Can be depended on to fulfil responsibilities accepted; is trustworthy even when not being watched, is self-reliant and calm and exercises self-control.

8. *Neatness and orderliness*.—Is tidy and orderly in work and play; is clean and trim in personal appearance.

9. *Self-confidence*.—Has courage to attempt the difficult; shows assurance and confidence in behavior; shows finality of decision.

10. *Co-operation*.—Has the art of working with others harmoniously; shows willingness to sacrifice in the accomplishment of the desired end.

11. *Originality*.—Is original in work and play, shows inventiveness, produces work without copying or imitating.

12. *Curiosity*.—Is keenly curious; explores, investigates, asks questions, and shows interest in the strange and novel.

13. *Leadership*.—Shows initiative, self-reliance, tact, decisiveness, aggressiveness, and popularity which inspires others to follow and co-operate.

14. *Cheerfulness*.—Laughs and smiles frequently; is pleasant and happy.

Table 1 represents a rechecking of the pattern sources, which served a twofold purpose: (1) to ascertain whether each pattern was found in enough sources to warrant including it in the list and (2)

TABLE 1
PATTERNS OF SOCIAL MATURITY AND SOURCES
IN WHICH THEY WERE FOUND

PATTERN	FOUND IN—		
	Observation of Children	Interviews with Children	Related Studies
1. Group compatibility . . .	X	X	X
2. Kindness and sympathy .	X	X	X
3. Efficiency	X	X	X
4. Fair play	X	X	X
5. Emotional adjustability .	X	X	X
6. Courtesy and politeness .	X	X	X
7. Dependability	X	X	X
8. Neatness and orderliness .	X	X	X
9. Self-confidence	X	X	X
10. Co-operation	X	X	X
11. Originality	X	X	X
12. Curiosity	X	X	X
13. Leadership	X	X	X
14. Cheerfulness	X	X	X

to determine whether personal judgment had controlled the selection of patterns. Table 1 shows the patterns and their relation to three main sources. It reveals that all but two patterns were found in all three sources.

MEASUREMENT OF PATTERNS OF SOCIAL MATURITY

Selection of items.—The next step considered is the measurement of each basic pattern. A sampling of behavior items¹ covering each pattern was selected and placed in an objective rating instrument.

¹ The word "item" here refers to the way in which a child behaves when confronted with certain situations.

It is needless to reiterate the steps taken in the formulation of these items, since the same sources as were used in the selection of patterns were available. Another source, however, proved fruitful. A sheet listing the fourteen patterns and their definitions was given to a number of teachers, who were asked to list items of behavior which, in their opinion, should be considered in the measurement of each pattern. These suggestions were summarized under the pattern to which they applied. Although few were used as stated, they helped in obtaining a wide sampling of child experience.

An attempt was made to select items other than simple habits. Rather, those items were selected in which improvement should be made as a child passes from grade to grade. A large sampling was chosen in order to measure each pattern adequately.

Statement of items.—In order that the criteria set up for making rating scales useful might be met, all items were stated in positive, concrete form. Each statement represented a desired stage of development. This form of statement permits the rating of each child according to his degree of development in any particular trait. Thus children are not compared with one another but are rated on their actual growth.

Criticism of experts.—As a means of further validating the work done, the classification of items under each pattern was submitted to the criticism of experts. From their criticisms and suggestions a revised list of items was made. In all, 157 items were classified under the fourteen patterns.

An instrument of measurement.—These 157 items were placed in a rating instrument for the measurement of social maturity at the primary-grade level. This instrument is called the "Long Form of the Rating Scale of Social Maturity." Development in each item is represented by the following five-point scale.

"1" means *never*. The child has no development in the trait.

"2" means 25 per cent of the time. The child has some development but is still very low.

"3" means 50 per cent of the time. There is a fifty-fifty chance that the child will respond to the trait as given.

The term "scale" is here used as a descriptive term. In the strict technical sense this term should be reserved for an instrument in which the units of measurement have been definitely graduated

"4" means 75 per cent of the time. The child is noticeably developed in the trait so that he responds very often in the right way.

"5" means *always*. The child has complete development in the trait.

On each of the 157 items a child is given the point score which most nearly represents his development. The total number of points received is the social-maturity score of the child, and it represents a quantitative statement of his social development. This long form is far too cumbersome for the average classroom teacher. However, it represents an adequate inventory and gives a picture of social behavior for the primary-grade child.

Validity of the instrument.—The validity of the social-maturity rating scale is based on (1) the care taken to incorporate within the rating scale those items which are of prime importance in the measurement of social maturity, (2) the criticism of competent judges, (3) the use of related studies, and (4) a sampling of items large enough to include the essentials in the measurement of social maturity.

Reliability of the instrument.—The scale was used in two schools and was then checked for reliability. In both schools the first three grades were equally represented with twenty-five children in each grade. These 150 children were rated by the scale. The chance-halves method was used for the computation of reliability. In one school the reliability for the combined grades was .972; in the other, .989. Reliability was also computed by the rank-difference method for twenty-five children. The reliability for one first grade was .831; for one third grade, .979. Reliability was computed by the rank-difference method for the purpose of showing that the reliability was not high merely because the three grade groups were combined.

A SCALE FOR THE MEASUREMENT OF GROWTH IN SOCIAL MATURITY

To measure social maturity in terms of growth items is not easy. Social maturity is not defined as are other growth factors. Yet certain attitudes and habits acquired in school and through mingling with others are of more importance than the mastery of subject matter. Even though this fact is known, few teachers take into account the social development of their pupils. Before teachers can

be expected to place emphasis on social maturity, a brief, objective, and all-inclusive instrument of measurement must be available.

Experimental situation.—The same 150 children were used for the study of growth. The mean intelligence quotients for the grades used did not vary more than five points between the two schools, and the children, as judged by the teachers, showed about the same social background. These children, selected as representative of their grades, were rated on the 157-point scale. Pattern names were omitted to avoid biased judgment.

Growth in scores.—Combined group scores were consistently higher for each succeeding grade. With but three exceptions, combined group scores for each pattern showed growth gains. Of the 157 items, thirty-nine showed growth gains in score for each successive grade in both schools. Sixty-three more showed score gains when the groups were combined.

SHORT FORM OF THE RATING SCALE OF SOCIAL MATURITY

The thirty-nine items showing consistent growth in both groups and one other item showing growth when the groups were combined were correlated with the scale of 157 items.

The correlation between these items of growth and the 157-point scale for 150 primary-grade children was $.844 \pm .06$. This correlation shows a definite relation between the score made on growth items and the social-maturity score. It points further to the practicability of formulating a brief scale with norms for each grade which would truly represent the rating scale in its long form.

The first step in the formulation of a representative group of items was to include, with the list of thirty-nine, the sixty-three items showing growth gains when the groups were combined. One hundred and two items were then left for the selection of the short scale. The following standards were considered in selection: (1) A greater number of items should be selected from patterns which seem most important. (2) Items showing greatest variability between grade scores should have preference. (3) Items showing a tendency for consistent growth from grade to grade should be used.

Seventeen teachers were asked to judge the patterns as to their importance in the development of social maturity.

Items selected for a new scale.—Thirty items were selected for a new social-maturity scale. The number of items selected under each pattern was based largely on the teachers' judgment of its importance. All patterns were represented. This group of thirty items is termed the "Short Form of the Rating Scale of Social Maturity."¹ The correlation between the short form and the long form of the scale is $.925 \pm .007$. This correlation is highly significant, for the short scale is stated in concrete form and is easily administered.

TABLE 2
DISTRIBUTION BY AGE OF SCORES MADE ON SHORT FORM
OF THE RATING SCALE OF SOCIAL MATURITY

Age Interval (In Years and Months)	Number of Pupils	Mean Score	Lowest Score	Highest Score
9-0 to 9-3.	7	113	91	124
8-8 to 8-11...	22	110	77	127
8-4 to 8-7 ..	17	106	80	125
8-0 to 8-3.....	14	101	71	120
7-8 to 7-11. .	19	94	65	120
7-4 to 7-7 . . .	11	101	83	120
7-0 to 7-3. . .	15	93	67	121
6-8 to 6-11. . .	19	87	72	111
6-4 to 6-7. . .	15	78	68	110

Tentative grade norms.—The means, figured to the nearest whole number, made by the 150 primary-grade children on the Short Form of the Rating Scale of Social Maturity, are as follows: 86 for Grade I, 98 for Grade II, and 111 for Grade III. Consistent advancement is seen in the mean scores made. These means are to be considered only as tentative norms.

The question whether children advance socially by chronological age was studied for 139 children ranging between six years and four months of age to nine years and three months. These children were those in the group of 150 previously discussed who were within this three-year range.

Table 2 shows the averages, to the nearest whole number, made

¹ A copy of the items used in this scale is found at the conclusion of this article.

on the Short Form of the Rating Scale of Social Maturity. Age intervals of four months are used for these primary-school children. It is difficult to draw definite conclusions from these figures because there are too few cases in each age interval. There is, however, a definite trend toward growth, and in only one case is the mean age score less than the preceding score. If the children were divided at six years, seven years, eight years, and nine years, a definite tendency toward growth would be shown. This table further reveals that, within this three-year range, some children in older age intervals make almost as low scores as those in younger age intervals. The reverse is also true.

TABLE 3
CORRELATIONS BETWEEN RATINGS OF SAME CHILDREN BY
DIFFERENT TEACHERS ON SOCIAL-MATURITY SCALE

GRADE TAUGHT BY RATER	CORRELATION OF RATINGS GIVEN CHILDREN IN—		
	Grade I	Grade II	Grade III
I and II	.41 ± .11	.72 ± .07	.85 ± .04
I and III	.47 ± .11	.71 ± .07	.81 ± .07
II and III	.47 ± .11	.85 ± .04	.88 ± .03

CONSISTENCY OF JUDGMENT BETWEEN
DIFFERENT TEACHERS

Three teachers were asked to use the scale to rate a group of the same children. Seventy-four primary-school children were selected from three schools in the city of Cincinnati for this purpose. Table 3 shows the correlations between the ratings for each grade.

The most significant fact in this table is the consistency of the coefficients of correlation for each grade. All first-grade correlations range from .41 ± .11 to .47 ± .11. Even though these correlations are not high, scarcely could it be said that they represent only chance relationships. The second-grade correlations range from .71 ± .07 to .85 ± .04. These correlations are within close range and are high enough to be significant. The third-grade correlations range from .81 ± .07 to .88 ± .03. From an analysis of the table it ap-

pears that third-grade children can be more accurately rated than can second-grade children and that second-grade children can be more accurately rated than can first-grade children. Since the correlations of Table 3 indicate that the rating scale is objective, the scale may be used with confidence in the primary school.

CONCLUSIONS

The facts revealed by this study allow the following conclusions:

1. This investigation is a pioneer study in the measurement of social maturity with attention centered on the growth aspect of traits and items. In the primary grades of two elementary schools a high positive correlation of $.844 \pm .06$ exists between social-maturity scores and scores made on items showing consistent growth gain. Further analysis of items shows a tendency toward growth in most items.

2. The Short Form of the Rating Scale of Social Maturity, made up of thirty carefully selected growth items, has a correlation of $.925 \pm .007$ with the 157 items contained in the Long Form of the Rating Scale of Social Maturity.

3. When three teachers rated the same children on the Short Form of the Rating Scale of Social Maturity, the correlations of their ratings showed consistency and reliability.

4. In view of the importance of social maturity in school success, special attention should be given to the measurement and the development of social traits of children in the primary grades. This study not only shows the importance of these traits but has developed a scale reasonably accurate for the measurement of the traits.

ITEMS USED IN THE SHORT FORM OF THE RATING SCALE OF SOCIAL MATURITY

1. Does he return to a task unfinished from the previous day and develop it?
2. Does he tell the whole truth in each situation, that is, not pointing at someone else?
3. Would he admit his misdemeanor, for example, tearing a page from a book, breaking a window, tripping another, etc.?
4. Does he make friends quickly and easily?
5. Does he subjugate himself to reasonable demands of the group when convinced of their value?

6. Does he adjust himself to the opposite sex without appearing self-conscious?
7. Does he lose himself as an individual in the group?
8. Does he exhibit good school spirit?
9. Would he do something which might work a hardship on himself, for the good of the group?
10. Does he remain calm when he cannot get what he wants?
11. Is he able to take a joke?
12. Is he free from nervous habits, for example, biting nails, fiddling with hands and clothes?
13. Does he accept decisions of the one in charge of the game without showing emotion?
14. Does he accept failures as his own responsibility, that is, does not blame others, tools, or materials, or exaggerate another's part?
15. Does he play games fairly with all children, not taking unfair advantage of others?
16. Does he, of his own free will, try to be courteous and polite?
17. Does he answer questions in polite language and polite manner?
18. Does he work as far as possible on a problem before asking help?
19. Does he have confidence in his own ability to meet new problems in his work and play?
20. Is he inclined to sympathize rather than laugh at those in difficulty?
21. Are his remarks about others kind, that is, not saying things to hurt others' feelings?
22. Does he have good posture habits?
23. Is he interested in having the finished product neatly and well done, that is, does he regard neatness ahead of speed, "getting by," etc.?
24. Does he have good taste in decoration, for example, bulletin board, teacher's desk, flowers, windows, etc.?
25. Is his characteristic facial expression agreeable?
26. Does he have a direct, pleasant manner of speaking, not egotistical, shy, or self-conscious?
27. Does he go from one purposeful activity to another without waste of time?
28. Can he think accurately in unusual circumstances, for example, loss of books and materials, facing an accident, sudden anger in others, etc.?
29. Is he alert and interested in new situations?
30. Can he put himself forward without antagonizing others?

EFFECTIVENESS OF CHARACTER-BUILDING AGENCIES

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*

How effective are the character-building agencies? Which agencies give the best response when the schools ask their help in promoting the welfare of boys and girls? What are the home and community influences that produce problem children? To answer these and similar questions, the Research Committee of the Seattle Principals' Association¹ undertook an investigation in January, 1938. The main purpose of the study was to answer the second question, but the results provided much additional information.

Investigation was made of problem children selected by the principals of the various schools. As a basis for contrast, an equal number of superior children were studied. The instructions to principals were as follows:

The Research Committee of the Seattle Principals' Association has undertaken a study of community agencies and influences that affect the welfare of boys and girls. The necessary data will be obtained from a study of problem children as contrasted with superior children. In the large schools the number of boys in each group should be approximately equal to the number of girls.

For each child, problem or superior, fill out one of the inclosed questionnaires. Those for the problem children are colored, while those for the superior children are white. Otherwise, the two are identical.

Check, in the appropriate column, any information you have, or can obtain by interview or otherwise, concerning each child. Of course principals will consult with teachers, nurse, counselor, or anyone else who can assist in preparing a complete picture of the situation. You are urged to check each item definitely and carefully that the information may be specific and reliable. Space has been provided where you may write additional facts.

The committee realize that this will take some time. However, we have tried to make the demand no more than necessary. We thank you for your

¹ The committee was composed of the following members: H. E. Dickerman, Ballard High School; Raymond W. Elder, Maple School; Charlotte Graham, Emerson School; Dora S. Herren, Montlake School; J. M. Knisley, John Marshall Junior High School; and Edgar A. Stanton (chairman), Brighton School.

co operation and assure you that we shall endeavor to make the results of value to you.

Questionnaires were returned by forty-six schools. One hundred and seven problem cases and 110 superior children were reported. Since the two groups represented every grade from first to twelfth, all types of school organization, and practically every possible condition of home and community, the committee felt that, in spite of the comparatively small numbers, the study was sufficiently comprehensive to give reliable conclusions.

The problem group consisted of seventy-five boys and thirty-two girls with a median age of fourteen years. In the superior group were fifty-nine boys and fifty-one girls. Their median age was twelve years. Evidently boys are more likely than are girls to be considered problems. When it comes to recognition for excellent work, conditions are fairly even. Apparently it takes two years less to become outstanding for scholastic achievement than to gain a similar position as a source of trouble.

Table 1 shows an average of 2.2 requests for help from community agencies for each problem child and only one request for each two superior children. It also shows that the agencies most likely to be asked for help in the adjustment of problem pupils are those which are part of the school organization or are closely associated with it. Thus the first three agencies received 129 requests for help with the problem children, or 55 per cent of all requests for that group. The requests for superior children do not show this tendency, for they are scattered over many agencies. Doubtless the reason for the former condition is that the schools are organized to care for the conditions which are the most troublesome.

Data on the effectiveness of the various agencies are given in Table 2. When comparisons are made, it should be remembered that the types of difficulties referred are not the same. The problems with which the Junior Red Cross deals are usually different from those coming before the Juvenile Court. It is noteworthy that, although the Co-ordinating Council has been well established in Seattle for the past three or four years, this agency has not been asked for help for any of the 217 pupils. It is doubtless true also

that, outside of satisfaction of material wants, many of the requests involving problem children are more serious than those for the superior group. In other words, the greater effectiveness in dealing with superior children results partly from the differences in the

TABLE I
COMMUNITY AGENCIES AVAILABLE FOR HELP IN PUPIL ADJUSTMENT
AND FREQUENCY OF REQUESTS FOR HELP FOR 107 PROBLEM
CHILDREN AND 110 SUPERIOR CHILDREN

AGENCY	PROBLEM CHILDREN		SUPERIOR CHILDREN	
	Number of Requests	Per Cent	Number of Requests	Per Cent
Child guidance department . . .	59	55	8	7
Attendance department	43	40		
Junior Red Cross. . .	27	25	5	5
State Welfare Department	20	19	4	4
Juvenile police officer. . .	20	19	2	2
Juvenile Court .	17	16		
Boy Scouts. .	10	9	9	8
Playground leader .	8	7	4	4
Family Society . .	7	7	2	2
Pastor of church. .	6	5	5	5
Ryther Child Center .	5	5		
Campfire Girls. . .	3	3	3	3
Girl Scouts . .	3	3	3	3
Y.M.C.A. .	3	3	5	5
Y.W.C.A. .	1	1		
Lions Club .			3	3
Kiwanis Club .			1	1
Other service clubs. .	1	1	1	1
Co-ordinating Council . . .				
Total.	233		55	

nature of the situations involved but largely from the difference in the children involved, since brighter children usually respond better to the efforts made to adjust them.

Table 3 shows clearly that the outstanding good influences in the community are the library, the Sunday school, the supervised playground, the church, and the fieldhouse. The gang, the beer parlor, the public dance, and the pool hall are the worst influences. The movies occupy a paradoxical position, doing both good and harm. This paradox is explained by the great variation in the programs

offered. Also, superior children probably attend less frequently and choose better pictures than do the problem children.

TABLE 2
EFFECTIVENESS OF RESPONSES TO REQUESTS MADE OF COMMUNITY
AGENCIES FOR HELP IN ADJUSTMENT OF PROBLEM AND
SUPERIOR CHILDREN*

AGENCY	PERCENTAGE OF EFFECTIVE RESPONSES		PERCENTAGE OF INEFFECTIVE RESPONSES		PERCENTAGE IN WHICH EFFECTIVENESS OF RESPONSE WAS UNDETER- MINED	
	Problem Children	Superior Children	Problem Children	Superior Children	Problem Children	Superior Children
Child guidance department	66	88	5		29	12
Attendance department . . .	57		12		21	
Junior Red Cross	85	100			15	
State Welfare Department	65	100	5		30	
Juvenile police officer . . .	75	50	10		15	50
Juvenile Court	71		18		11	
Boy Scouts	30	56	30		40	44
Playground leader	25	50	13		62	50
Family Society	71	100			29	
Pastor of church	67	80	16		17	20
Rhyther Child Center	40				60	
Campfire Girls	67	100			33	
Girl Scouts	33	100			67	
Y.M.C.A. . . .	33	80			67	20
Y.W.C.A. . . .	100					
Lions Club		67				33
Kiwanis Club		100				
Other service clubs	100	100				
Co-ordinating Council . .						
Total	66	80	8		26	20

* The percentages in this table are based on the number of requests for help made to each agency as given in Table 1.

The difference in the home conditions of the two groups, as shown in the first nine items in Table 4, is enlightening. For certain of the items the ratio of the percentages for the problem children to the percentages for the superior children are as follows: mother dead, 1.8; father dead, 4.0; parents separated or divorced, 3.4; step-parent in home, 2.6; discordant home, 2.9; weak home (unable to control child), 13.5. An examination of the original table of frequen-

cies, not reproduced in this article, shows that the total of these home conditions, which are in most cases unsatisfactory, is 174 for the problem group and 37 for the superior. Although these totals involve duplications, their disparity is significant. The problem children face almost five times as many unsatisfactory conditions in home organization.

TABLE 3

PERCENTAGES OF 107 PROBLEM CHILDREN AND 110 SUPERIOR CHILDREN ON WHOM CERTAIN COMMUNITY INSTITUTIONS HAVE EXERCISED DESIRABLE AND UNDESIRABLE EFFECTS

INSTITUTION	DESIRABLE EFFECT		UNDESIRABLE EFFECT		UNCERTAIN OR NO EFFECT	
	Problem Children	Superior Children	Problem Children	Superior Children	Problem Children	Superior Children
Library	42	90	2	1	56	9
Sunday school	32	70	4	..	64	30
Supervised playfield	21	6	3	..	76	94
Church	20	53	3	..	77	47
Fieldhouse	14	22	5	..	81	78
Movies	14	48	22	..	61	52
Public dance	5	5	12	1	83	94
Drug stores	3	4	3	1	94	95
Gang	3	5	19	3	78	92
Prize fights	2	3	2	..	96	97
Unsupervised playfield	2	1	6	1	92	98
Wrestling matches	2	3	7	1	91	96
Beer parlor . . . . .	..	..	14	4	86	96
Pool hall . . . . .	..	..	8	2	92	98

The difference in co-operation tells a great deal. Only a fourth of the parents of the problem children work well with each other, although slightly more than half of them work with the school. On the other hand, 87 per cent of the parents of the superior group co-operate with each other, and slightly more co-operate with the school.

It is noteworthy that, when consideration is given to matters more or less of a moral nature—stealing, truancy, sex problems, and smoking—there is a striking contrast: a fairly large amount of difficulty in the problem group, almost none in the superior group.

Particular attention is called to the relation of economic condi-

TABLE 4

PERCENTAGES OF 107 PROBLEM CHILDREN AND 110 SUPERIOR CHILDREN
WHOSE ADJUSTMENTS HAVE BEEN INFLUENCED BY CERTAIN
HOME AND SOCIAL CONDITIONS

INFLUENCES	YES		NO		UNDETERMINED	
	Problem Children	Superior Children	Problem Children	Superior Children	Problem Children	Superior Children
Mother dead...	7	4	76	82	17	14
Father dead.....	16	4	67	80	17	16
Parents separated	19	7	46	75	35	18
Parents divorced.....	18	4	48	74	34	22
Child has stepfather...	14	5	56	75	30	20
Child has stepmother	7	3	53	76	40	21
Child boards.....	7	5	50	59	43	36
Discordant home.....	29	1	34	72	37	27
Weak home (unable to control child).....	54	4	20	69	26	27
Parents co-operate with each other.....	25	87	34	9	41	4
Parents co-operate with school.....	51	88	22	5	27	7
Parents use liquor....	17	9	29	59	54	32
Mother smokes.....	21	8	35	63	44	29
Parents attend church	25	60	35	13	40	27
Outside work:						
Father.....	54	74	6	4	40	22
Mother.....	22	10	45	56	33	34
Child.....	25	16	40	52	35	32
Child has allowance...	23	53	50	21	27	26
Child owns bicycle...	27	39	45	48	28	13
Child owns or uses automobile.....	12	13	54	66	34	21
Child steals.....	20	..	43	79	37	21
Child is truant.....	35	1	43	80	22	19
Child presents moral or sex problem.....	10	..	46	82	44	18
Child smokes.....	22	..	46	82	32	18
Child hears desirable radio programs.....	31	82	28	4	41	14
Economic conditions of home:						
Poor.....	40	6	..	..	4	15
Fair.....	47	17	..	..
Good.....	9	62	..	..
Parties:						
Child attends few ..	64	45	..	..	27	48
Child attends many ..	9	7	..	..
Health of child:						
Poor.....	13	..	..	..	5	12
Fair.....	39	11	..	..
Good.....	43	77	..	..
Child keeps late hours at home.....	26	6	..	43	74	51
Child keeps late hours outside.....	37	5	..	43	63	52
Home duties:						
A number.....	21	22	..	..	16	19
Few.....	63	59	..	..

tions and school progress. Forty per cent of the problem group are considered to be in poor economic situations, in contrast with 62 per cent of the superior children whose economic conditions are considered good. As great a contrast is found in health.

It is evident that, while these two groups are in the same city and certain pupils live in the same community and attend the same school, there is little other similarity in the conditions under which the two sets of children are growing up. It is not too much to say that for all real purposes the two groups do not live in the same city. The social agencies, the community influences, the homes are so different in their effects that life has quite dissimilar meanings. In the case of the superior children, the school may expect normal homes with peace, security, and good health; may expect the library, the Sunday school, and the church to exert a strong and helpful influence; may expect that high standards of morality and responsibility will be followed. The problem children live in disorderly, jangling, and insecure homes; their health is only fair; the community influences that aid in making good citizens are weak; the undesirable influences are active; and delinquency of various kinds is common.

This study shows that the principals' requests to the agencies for help for the problem cases have been more than four times as numerous as the requests for the superior children. While the responses have not been so effective in the case of the problem children, the schools are clearly making good use of the assistance obtainable. However, we know that the future inmates of the custodial and penal institutions are now in school under our direction, and we know that the conditions under which many of the children studied in this investigation are now living produce most of the undesirable citizens. The median age of the problem children in this study is slightly over fourteen years. If they continue to live for a few years more under the conditions in which they are now living, it is probable that more than 19 per cent will be known to the police and that more than a sixth of their names will appear in court records.

Forty-five per cent of these children have not been studied by the child guidance department. Nineteen agencies have been asked to assist a total of 233 times, an average of only 12 for each agency.

If the character-building institutions perform the services that they are organized to perform, then these schools have not made sufficient use of them. Several service clubs have rather elaborate plans for assisting boys and girls, but little opportunity to help has been offered these clubs.

Undoubtedly the only cure for undesirable activity is to substitute activity which is desirable. Should not the schools make more use of the means at hand to change the situations of these boys and girls who are now living in a way that leads so much of the time to ill health, conflicts with authority, and even to imprisonment?

Many of the conditions that produce problem children are largely beyond the immediate influence of the school. If the forces of disintegration do not outstrip those that produce integration in family life, the slow process of general education will improve home conditions. The school must labor to reduce the undesirable effects of the gang and the beer parlor and to increase the power of the library and the church. Even here the school must travel with the community and not ahead of it. There are, subject to call, numerous organizations with trained workers to assist in the adjustment of children in a rapidly changing society.

As was stated at the beginning, the main purpose of this investigation was to determine the effectiveness of social agencies. An approximate answer has been found. School administrators who are interested in the product of education as well as the process also have another question: How effective are school principals in using social agencies in the adjustment of problem children? The committee felt that in Seattle much has been left undone. The reader must answer the question for the community in which he works

SELECTED REFERENCES ON ELEMENTARY-SCHOOL INSTRUCTION

II. THE SUBJECT FIELDS

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THIS list of references is the second in a series of three lists relating to instruction at the elementary-school level. The preceding list, appearing in the September number of the *Elementary School Journal*, contains items on the curriculum, methods of teaching and study, and supervision. The present list and the next list in the series include references on these same major aspects of instruction, but the items are grouped by subject fields.

READING¹

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483. BENNETT, H. K. *The Iowa Plan for Directed Study through Work-Type Reading*. Des Moines, Iowa: State Department of Public Instruction, 1939. Pp. 122. (See also "Individualizing the Instructional Program in the Content Subjects," *Midland Schools*, LIII [April and May, 1939], 240, 282.)

Describes the plan adopted for improving work-type reading, the results secured in several counties, and the procedures which seem advisable in further efforts to increase efficiency in this type of reading.

484. BERMAN, ARTHUR. "The Influence of the Kinesthetic Factor in the Perception of Symbols in Partial Reading Disability," *Journal of Educational Psychology*, XXX (March, 1939), 187-98.

¹ This list of references does not include articles and books pertaining specifically to reading in the primary grades. Such references are included in the list provided by Katherine McLaughlin which appears in the April, 1939, issue of the *Elementary School Journal*.

In connection with this list see also Items 193 (Wrightstone, Rechetnick, McCall, and Loftus) and 201 (Hogan and Yeschko) in the list of selected references appearing in the April, 1939, number of the *Elementary School Journal*; Item 293 (Davis) in the May, 1939, number of the *Elementary School Journal*; Item 441 (Dimmick) in the September, 1939, number of the *Elementary School Journal*; and Item 378 (Leavell and Sterling) in the May, 1939, number of the *School Review*.

Analyzes the effect of using a "kinaesthetic-tactual stimulus" for recognition, acquisition, and retention of nonsense syllables and geometrical figures. Thirty-four partial reading disability cases, aged eight to fifteen, served as the subjects.

485. CALIFORNIA LIBRARY ASSOCIATION, SECTION FOR WORK WITH BOYS AND GIRLS. "Choosing the Right Book: A List for Teachers and Librarians To Use with Retarded Readers," *Elementary English Review*, XVI (January, 1939), 21-23.

Presents a list of books selected by librarians as suitable for slow readers at the elementary and junior high school levels.

486. *Causes of Retardation in Reading and Methods of Eliminating Them*. Detroit, Michigan: Language Education Department, Division of Instruction, Detroit Public Schools, 1938. Pp. 31. (See also Gertrude Whipple, "Causes of Retardation in Reading and Methods of Eliminating Them," *Peabody Journal of Education*, XVI [November, 1938], 191-200.)

Describes the causes underlying retardation and specific types of deficiency in reading, the steps essential in identifying causal factors, and the principles and methods for dealing with reading retardation.

487. DAW, SEWARD EMERSON. "The Persistence of Errors in Oral Reading in Grades Four and Five," *Journal of Educational Research*, XXXII (October, 1938), 81-90.

Compares types of errors in oral reading made by two hundred fourth- and fifth-grade pupils with those made by third-grade pupils; suggests remedial procedures for the five most serious deficiencies.

488. DODSON, P. J. "A Modern Program of Reading Instruction in a Public School System," *Peabody Journal of Education*, XVI (November, 1938), 175-80.

Reports data on the effectiveness of employing the ophthalmograph and metronoscope as part of the regular reading program in the first six grades.

489. DOLCH, E. W. "Fact Burden and Reading Difficulty," *Elementary English Review*, XVI (April, 1939), 135-38.

Presents findings of a tentative study regarding the "fact" burden of school textbooks dealing with geography, history, science, and health. Compares books from first- to sixth-grade levels.

490. EAMES, THOMAS HARRISON. "The Ocular Conditions of 350 Poor Readers," *Journal of Educational Research*, XXXII (September, 1938), 10-16.

Presents data from 350 poor readers showing frequencies and central tendencies with respect to "visual acuity, refraction, co-ordination of the eyes in distant vision and in near vision, the amplitude of fusion convergence for twelve-point type, ductions, central fields, and lateral dominance."

491. EAMES, THOMAS H. "The Speed of Picture Recognition and the Speed of Word Recognition in Cases of Reading Difficulty," *American Journal of Ophthalmology*, XXI (December, 1938), 1370-75.
Compares the speed of word recognition and picture recognition for one hundred cases of school children having difficulty in reading and fifty cases without reading difficulty. Comparisons involving those with and without eye difficulties are also made.
492. ERICKSON, MARION IURIG. "Developing Reading Tastes in Magazine Literature," *Elementary English Review*, XVI (January, 1939), 10-14.
Presents the outcomes of an experiment designed to improve the reading tastes and habits of thirty-five sixth-grade children.
493. GATES, ARTHUR L., BOND, GUY L., and RUSSELL, DAVID H. "Relative Meaning and Pronunciation Difficulties of the Thorndike 20,000 Words," *Journal of Educational Research*, XXXII (November, 1938), 161-67.
Presents findings from a study of six hundred children in Grades II B-VI A to determine relative ability to recognize, pronounce, and give meanings of thirty words from each of the successive thousands of the Thorndike list.
494. HEGOE, THORLEIF G. "Remedial Approaches to Reading Difficulties in the Mentally Handicapped," *Elementary English Review*, XV (December, 1938), 293-96.
Discusses problems involved in teaching mentally handicapped children to read, with principles and remedial approaches found valuable.
495. JACKS, ROBERT W. "The Status of the Workbook in Classroom Instruction," *Educational Method*, XVIII (December, 1938), 105-9.
Summarizes investigations concerned with the value of the workbook as contrasted with other aids and devices utilized in the teaching of reading in the content fields. Finds the available evidence inconclusive.
496. JOHNSTON, FANNIE B. "A New Point of View for Remedial Reading," *Educational Research Bulletin*, XVII (May 3, 1939), 127-32.
Describes the procedures and the results of a program of remedial reading for pupils in Grades IV-VI, inclusive, incorporating "the theories and practices urged by mental hygienists."
497. KIBBE, DELLA E. *Improving the Reading Program in Wisconsin Schools*. Curriculum Bulletins, Vol. II, No. 4. Madison, Wisconsin: State Department of Public Instruction, 1939. Pp. 60.
Describes "present-day trends of instruction in reading" and presents "suggestions for improving instructional activities."
498. LEWERENZ, ALFRED S. "Selection of Reading Materials by Pupil Ability and Interest," *Elementary English Review*, XVI (April, 1939), 151-56

Sets forth principles for selecting classroom reading materials, grouping them in terms of pupil and reading matter variables, with suggestions for procedures in selection based on these principles.

499. LOOBY, RUTH. "Understandings Children Derive from Their Reading," *Elementary English Review*, XVI (February, 1939), 58-62.

Reports data regarding the ability of seventy-seven sixth-grade children to understand words and phrases read in literature, and the influence of such factors as mental ability, reading comprehension, and use of context.

500. MAHAJIAN, CHARLES. "Measuring Intelligence and Reading Capacity of Spanish-speaking Children," *Elementary School Journal*, XXXIX (June, 1939), 760-68.

Presents data on 313 Spanish- and English-speaking children in Grades I-VII; compares relative reading achievement on tests given both in Spanish and in English.

501. *Newer Practices in Reading in the Elementary School*. Seventeenth Year-book of the Department of Elementary School Principals. Bulletin of the Department of Elementary School Principals, Vol. XVII, No. 7. Washington: Department of Elementary School Principals of the National Education Association, 1938. Pp. 704.

Presents a series of stimulating papers and reports concerning such topics as "Reading Readiness," "Beginning Instruction in Reading," "Cultivating Appreciation and Good Taste in Reading," "Study Reading in the Content Fields," etc.

502. OAK, LURA. "An Appraisal of the Betts Visual Sensation and Perception Tests as a Sorting Device for Use in Schools," *Journal of Educational Psychology*, XXX (April, 1939), 241-50.

Reports an investigation involving two hundred children aged six to fifteen to determine whether the Betts tests as "dispensed and used in schools serve to sort out the children who should be referred to an eye specialist."

503. OBERHOLTZER, E. E. "Growth in Reading in an Integrated Curriculum," *Elementary English Review*, XVI (April, 1939), 125-28, 156.

Discusses the contributions that an integrated curriculum may make to growth in reading.

504. OSBURN, W. J. "What Next in Reading?" *Elementary English Review*, XVI (April, 1939), 142-46

Describes various programs of vocabulary training emphasizing word relationships. Gives data on the effect that vigorous training of this type had on mental ages of twenty-one pupils of nine to fifteen years old.

505. REIDY, ANNE. "Some Implications toward Vocabulary Building in Fourth Grade," *Educational News Bulletin*, IX (February, 1939), 59-64. Kalamazoo, Michigan: Western State Teachers College.

Presents an analysis of reading and vocabulary scores of a fourth-grade group and discusses their implications with respect to vocabulary-building.

506. ROBINSON, HELEN M. "Treatment of Severe Cases of Reading Disability," *Journal of Educational Research*, XXXII (March, 1939), 531-35. Sets forth seven general principles underlying treatment of reading disabilities and describes various remedial methods employed at the Orthogenic School, University of Chicago.

507. ROSENBAUM, HORTENSE L. "The Motivation of Library Reading through Conference Periods," *Educational News Bulletin*, IX (February, 1939), 71-74. Kalamazoo, Michigan: Western State Teachers College.

Presents data showing the number of books read by a fourth-grade class which participated one day each week in a "conference group" on library reading, compared with the number read by a control group.

508. SEEGER, J. CONRAD (Chairman). *Vocabulary Problems in the Elementary School*. Prepared by a Committee of the National Conference on Research in English. Seventh Annual Research Bulletin of the National Conference on Research in English. Chicago: Scott, Foresman & Co., 1939. Pp. 60.

Presents the results of a survey of research relating to elementary-school vocabulary, indicates the areas in which there are authentic findings, and points out areas in which fuller research is needed.

509. Sisson, E. DONALD. "The Causes of Slow Reading: An Analysis," *Journal of Educational Psychology*, XXX (March, 1939), 206-14.

Surveys results of reading investigations to select the factors most strongly influencing level of reading ability, and suggests techniques for remedying individual weaknesses in such factors.

510. "A Study of Phonics and Speech Correction for the Wood County Schools, Wood County, Ohio." Prepared by the Primary and Intermediate Teachers. Bowling Green, Ohio: Charles S. Harkness (County Superintendent of Schools), 1938. Pp. iv+96 (mimeographed).

A compilation of principles and procedures of value in the teaching of phonics and of speech correction in Grades I-III and IV-VI. Emphasizes objectives, activities, methods and techniques of teaching, and materials such as books, games, and seatwork.

511. TINKER, MILES A. "Trends in Diagnostic and Remedial Reading as Shown by Recent Publications in This Field," *Journal of Educational Research*, XXXII (December, 1938), 293-303.

Summarizes, primarily for practical needs of teacher and clinician, fifty-four outstanding recent reports dealing with diagnostic and remedial reading, including general treatments, experimental sources, and descriptions of materials and methods.

512. TRAXLER, ARTHUR E., and SEDER, MARGARET A. "Summary and Selected Bibliography of Research Relating to the Diagnosis and Teaching of Reading, October, 1937, to September, 1938." *Educational Records Supplementary Bulletin C*. New York: Educational Records Bureau, 1938. Pp. 21 (mimeographed).
Presents a summary and an annotated bibliography of sixty-five items "relating to the diagnosis and teaching of reading."
513. WITTY, PAUL. "Reading, Remedial Reading and General Education," *Educational Method*, XVIII (May, 1939), 425-31.
Presents a program for the poor reader, with emphasis on need for knowledge of the child's reading status, of his interests and needs, and of "individually desirable and educationally worthy" types of literature for children.

ENGLISH¹

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514. ANDERSON, JOHN E. "The Development of Spoken Language," *Child Development and the Curriculum*, pp. 211-24. Thirty-eighth Yearbook of the National Society for the Study of Education, Part I. Bloomington, Illinois: Public School Publishing Co., 1939.
Summarizes research on the development of spoken language from infancy on, stressing the importance of a stimulating environment.
515. BREDE, ALEXANDER. "Grammar Reconsidered," *Elementary English Review*, XVI (March, 1939), 86-90, 114.
Attacks the purist point of view in grammar and deplores undue stress on the teaching of grammar as an aid to speech and writing.
516. BRUECKNER, LEO J. "Language: The Development of Ability in Oral and Written Composition," *Child Development and the Curriculum*, pp. 225-40. Thirty-eighth Yearbook of the National Society for the Study of Education, Part I. Bloomington, Illinois: Public School Publishing Co., 1939.
Analyzes research on forms of oral and written speech and their relations to quality of composition and general growth in expression.

¹ See also Items 200 (Heffernan) and 213 (Dawson) in the list of selected references appearing in the April, 1939, number of the *Elementary School Journal*; Items 324 (Durland) and 340 (McKown) in the April, 1939, number of the *School Review*; Items 447 (Horrall and Others) and 481 (Wrightstone) in the September, 1939, number of the *Elementary School Journal*; and Item 508 (Seegers) in this list. Item 448 (*The Implications of Research for the Classroom Teacher*) in the September, 1939, number of the *Elementary School Journal* contains two articles of importance for English: J. Paul Leonard, "The Language Arts—English" and Willis L. Uhl, "The Language Arts—Literature."

517. BRUTSCHÉ, LILLIAN W. "Community Interests in the Creative Curriculum," *Peabody Journal of Education*, XVI (January, 1939), 285-91.
Shows possibilities for learning the gathering and the organizing of materials in a community unit.
518. CLARKE, T. E. "Letter Writing in the New Programs," *School* (Elementary Edition), XXVII (October, 1938), 144-49.
Suggests real letter-writing situations, with criteria for judging the value of letters written in the classroom.
519. EDMAN, MARION. "'Disarm the Hearts': Developing a Feeling of World Friendship," *Elementary English Review*, XVI (May, 1939), 176-78, 190.
Describes projects in which the purpose is to foster international understanding through reading, correspondence, exhibits, and the like.
520. *Good References on the Language Handicaps of Non-English-speaking Children*. United States Office of Education Bibliography No. 23, 1938 (revised). Pp. 14.
A bibliography of articles of use to teachers of non-English-speaking groups.
521. HARTMAN, GERTRUDE. *Finding Wisdom—Chronicles of a School of Today*. New York: John Day Co., 1938. Pp. xvi+148.
Presents activities of a progressive school from the kindergarten through Grade VIII with illustrations of creative work in the language arts and literature.
522. HIEFFERNAN, HELEN. "Sharing Experiences in the Modern School," *Elementary English Review*, XVI (March, 1939), 107-10, 118.
Makes a plan for a rich school environment as a basis for expression and presents a sample unit of work showing possibilities for written and oral expression and reading.
523. JOHNSON, ROY IVAN. "This 'Thing Called Integration,'" *Elementary English Review*, XVI (March, 1939), 83-85.
Discusses the implications of integration for the teacher of English, with a special plan for integration within the aspects of English itself.
524. LABRANT, LOU. "The Relations of Language and Speech Acquisition to Personality Development," *Mental Hygiene in Modern Education*, pp. 324-52. Edited by Paul A. Witty and Charles E. Skinner. New York: Farrar & Rinehart, Inc., 1939.
Presents the acquisition of language as a significant part of social adjustment and mental hygiene, with special reference to problems of teaching reading, creative writing, and speech.
525. LEONARD, EUNICE E. "Helping Children Express Themselves Creatively," *Elementary English Review*, XV (December, 1938), 306-8.
Suggests concrete ways of stimulating children of all levels of ability to do creative writing.

526. MARCKWARDT, ALBERT H., and WALCOTT, FRED G. *Facts about Current English Usage*. English Monograph No. 7 of the National Council of Teachers of English. New York: D. Appleton-Century Co., Inc., 1938. Pp. 144.
Presents in summary form the lists of elements of usage which made up the original Leonard study of current English usage, with a synopsis of the ruling upon each in the major scholarly sources of authority in English.
527. MELTNER, MARGUERITE F. *Offstage*. New York: Alfred A. Knopf, Inc., 1938. Pp. 134.
Offers concrete suggestions and illustrations of how to teach boys and girls to make plays from their favorite stories in literature.
528. MILLIGAN, JOHN P. "An Evaluation of Two Methods of Teaching Written Sentence Structure," *Elementary English Review*, XVI (March, 1939), 91-92, 106.
Gives evidence, on the basis of a controlled experiment with ten classes in Grades IV and V, of the slight superiority of an incidental method over a precise method of teaching sentence structure.
529. RASMUSSEN, CAROL. "Practical Ways of Developing Better Speech in the Elementary School," *Quarterly Journal of Speech*, XXIV (October, 1938), 485-88.
Urges development of a school environment which will stimulate free speaking and natural expression concerning daily experiences of pupils.
530. SISTERS OF CHARITY, CONVENT STATION, NEW JERSEY. "Christmas in Song and Story: A Unit of Work in English," *Catholic School Journal*, XXXVIII (December, 1938), 301-3.
Presents a unit built around the Christmas story, which involves a wide variety of reading and language skills, such as use of the library, reporting, story-telling, letter writing, and the like.
531. SMALLIDGE, OLIVE E. "Articulation of English between Elementary and Junior High School," *Elementary English Review*, XV (November, 1938), 259-64.
Presents a comprehensive statement of objectives and of philosophy governing English in the elementary school.
532. STORT, LEILA V. "Use of City Resources in the City and Country School, New York City," *Progressive Education*, XVI (March, 1939), 151-57.
Describes how the City and Country School in New York City utilizes the environment for inspiration to dramatic play and creative expression.
533. TRADUE, MARION R. "Better Results in Elementary School English," *Pennsylvania School Journal*, LXXXVII (December, 1938), 99-101.
Re-analyzes the purposes of elementary-school English and presents concrete proposals for realizing these purposes through greater motivation of the program in expression.

SPELLING¹

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534. CURTIS, H. A., and DOZIER, E. W. "Do Spelling-Books Teach Spelling?" *Elementary School Journal*, XXXIX (April, 1939), 584-92.

Describes the measurement of spelling achievement in a school system by means of ten fifty-word tests, each composed of words selected from all the grade lists of the speller in use. Results agree with Gilbert's findings (Luther C. Gilbert, "Effect of Reading on Spelling in the Secondary Schools," *California Quarterly of Secondary Education*, IX [April, 1934], 269-75) and with scores on pretests in showing that the mastery of a relatively large number of words is acquired incidentally.

535. FARRELL, ALFRED. "Spelling as a College Subject," *Journal of Education*, CXXII (January, 1939), 20-21.

Mentions the inauguration of a hospital class in reading for Freshmen at the University of Tennessee, and, after showing the results of spelling tests administered to classes in Freshmen English, advocates that instruction in spelling be made an integral part of the Freshman English course.

536. FITZGERALD, JAMES A. "The 100 Most Common Words and the 100 Most Misspelled Words in Third-Grade Life Letters," *Catholic School Journal*, XXXVIII (November, 1938), 268-69.

Presents the 100 words of highest frequency of use and the 100 words of the highest frequency of error in a list of 100,840 running words tabulated from 1,256 letters of third-grade children. The two lists overlap to the extent of about 50 per cent. The study prompts the question, "Should difficulty of words be used as a factor in the selection of the spelling vocabulary?"

537. GARVER, F. M. "Children's Writing Vocabularies as Bases for Spelling Lists," *Elementary English Review*, XVI (February, 1939), 47-49.

Discusses difficulty and usage of words as bases for their graduation in spelling. Shows the average grade placement of a writing vocabulary of second-grade pupils in the recent Gates list. Finds, as usual, that words placed in one elementary grade by one method tend to be scattered over all the grades when placed by another method.

538. KARCII, R. R. "Spelling for Printing Students," *Industrial Arts and Vocational Education*, XXVIII (April, 1939), 150-52.

¹ See also Item 546 (Varty) in this list. Item 448 (*The Implications of Research for the Classroom Teacher*) in the list of selected references appearing in the September, 1939, number of the *Elementary School Journal* includes the following article of significance in the field of spelling: Gertrude Hildreth, "The Language Arts—Spelling." Item 425 (*The Scientific Movement in Education*) cited in the September, 1938, number of the *Elementary School Journal* includes the following article: Ernest Horn, "Contributions of Research to Special Methods—Spelling."

Calls attention to the fact that the printing-trade employee must be able to recognize and correct misspelled words in copy. Finds a variety of the error-correction test suitable for measuring this ability.

539. MCINTYRE, FRANK O. "Pupils Defeat Adults in Spelling," *Nebraska Educational Journal*, XIX (March, 1939), 72, 82.

Reports competition in a spelling bee between a team of fifteen selected adults and a team of a similar number of high-school pupils. Four of the latter team remained for the competition after all adults were down.

540. NISBET, STANLEY D. "Non-dictated Spelling Tests," *British Journal of Educational Psychology*, IX (February, 1939), 29-44.

Compares results from multiple-choice, wrongly spelled word (error-correction), and skeleton-word spelling tests. Favors the skeleton-word test, although the objective data indicate the greater validity of the error-correction test.

541. PEASE, MARION OCHSNER. "Spelling Errors in Social Science Notebooks," *Elementary English Review*, XVI (February, 1939), 50-52, 62.

Finds that about 40 per cent of the words most frequently misspelled by seventh-grade pupils in social-science notebooks were in the spelling lists of earlier grades and about an equal number were words peculiar to social science. Concludes that the main problem was the development of a spelling consciousness.

II HANDWRITING¹

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542. COLE, LUELLE. "Instruction in Penmanship for the Left-handed Child," *Elementary School Journal*, XXXIX (February, 1939), 436-48.

A description of good and bad modes of writing for the left-handed child.

543. FREEMAN, FRANK N. "Language: The Development of Ability in Handwriting," *Child Development and the Curriculum*, pp. 255-60. Thirty-eighth Yearbook of the National Society for the Study of Education, Part I. Bloomington, Illinois: Public School Publishing Co., 1939.

A description of the features of growth and development which bear on the curriculum and on the method of writing.

544. FREEMAN, FRANK N. "Orthodoxy in Handwriting," *Grade Teacher*, LVI (January, 1939), 45, 59.

A discussion of modern practices in teaching writing.

¹ See also Item 209 (Wills) in the list of selected references appearing in the April, 1939, number of the *Elementary School Journal*. Item 448 (*The Implications of Research for the Classroom Teacher*) in the September, 1939, number of the *Elementary School Journal* includes the following article which summarizes the evidence on the chief questions in the handwriting curriculum: Frank N. Freeman, "The Language Arts—Handwriting."

545. HOUSTON, HARRY. "Manuscript Writing and Progress in Reading," *Elementary School Journal*, XXXIX (October, 1938), 116-18.
An experimental comparison of three groups of pupils
546. VARTY, JONATHAN W. *Manuscript Writing and Spelling Achievement*. Teachers College Contributions to Education, No. 749. New York: Teachers College, Columbia University, 1938. Pp. 64.
A comparison of progress made in spelling by manuscript and cursive writers in Grades II and III.

THE SOCIAL SCIENCES¹

R. M. TRYON
University of Chicago

547. BAISDEN, LEO B., and O'REILLY, E. P. "Elementary Social Studies Curriculum," *Curriculum Journal*, X (February, 1939), 60-63.
Describes the development of a six-year program with an approach from the social-functions point of view.
548. COLEMAN, CHARLES H. "The Maze of Methods," *Social Studies*, XXX (March, 1939), 123-25.
An attempt to classify the existing multitude of methods of instruction in the social sciences so as to eliminate the present confusion in this area of education.
549. FARTHING, DOROTHY K., and GORMAN, FRANK H. "The Selection of Modern Problems for Study in the Elementary School," *Educational Method*, XVIII (February, 1939), 243-45.
Gives criteria, suggested problems, and a sample treatment
550. GRISWOLD, GUY L. "The Teaching of Local History," *Montana Education*, XV (April, 1939), 17-18.
The teaching of local history briefly considered from the angles of methods of approach, the selection of topics, the difficulties involved, and the benefits to be achieved.
551. HIRSCH, GERTRUDE R. "A Civic Club," *Chicago Schools Journal*, XX (May-June, 1939), 227-29.
An account of the nature and the activities of a club that includes every pupil in the school in its membership but permits only the officers and the special representatives from rooms to attend its meetings.
552. JONES, HERBERT S. "Organization of a Functional Program in the Social Studies," *Platoon School*, XIII (March, 1939), 2-8.

¹ See also Item 23 (Frederick and Musselwhite) in the list of selected references appearing in the January, 1939, number of the *School Review* and Item 449 (Jensen) in the September, 1939, number of the *Elementary School Journal*.

- A plan for a type of organization of materials in the subjects of history, geography, and civics that will guarantee a functional program in these areas
553. KAAR, GALETA M. "Utilizing Community Resources in an Integrated Program," *Educational Method*, XVIII (February, 1939), 209-18.
Presents a program for a relatively underprivileged section of Chicago.
554. KEESECKER, WARD W. "State Laws Requiring Teaching of Citizenship in the Schools," *School Life*, XXIV (January, 1939), 112-13.
A tabular summary of state laws requiring the teaching of American government, history, and citizenship in public schools, with brief commentary.
555. KELTY, MARY G. "Middle Grade Sequences," *Social Education*, II (November, 1938), 549-58.
A penetrating analysis of such alternatives as the teaching of history and geography separately; the fusing of history and geography; the integration of history and geography with literature and the arts; and the abandonment of all subjects and the substitution of problems, themes, or cores.
556. KELTY, MARY G. "Reading the Materials of the Social Studies in the Middle Grades," *Elementary School Journal*, XXXIX (January, 1939), 337-51.
An effective presentation of a number of the aspects of the reading program involving the social-science content of the intermediate-grade curriculum.
557. KNOBLE, JOHN W. "The Teaching of Economics in the Sixth Grade," *Education*, LIX (February, 1939), 363-66.
Not a plea for the teaching of economics as a separate subject in Grade VI, but rather a case for the emphasis on the strictly economic aspects of the social sciences, such as geography, history, and sociology.
558. LEGGITT, DOROTHY. "Reading Newspapers and Magazines," *Social Studies*, XXIX (November, 1938), 296-301.
Suggestions for a presentation, an exploratory test, a guide sheet, a work sheet, and a mastery test for a unit of understanding concerned with the use of newspapers and magazines at the junior high school level.
559. LEWIS, MAE. "Arithmetic Can Be Correlated with the Social Studies," *Kansas Teacher*, XLVIII (April, 1939), 5-6.
A brief description of how a teacher of Grade V in Sedgwick, Kansas, handled a unit of understanding concerned with the Middle Ages in a so-called "integrated program"
560. MORRISON, J. CAYCE. "Elementary School Social Studies Program for New York State," *Social Education*, II (September, 1938), 409-13.
An exposition of how a new course of study in the social sciences for the elementary grades was developed in New York State.
561. MORRISON, J. CAYCE. "Trends in Social Studies," *School and Society*, L (July 1, 1939), 1-7.

A general account of a generation of attempts in the state of New York to answer the questions of what to teach and how to teach in the area of the social sciences

562. PHIPPS, WILLIAM RODGERS. "An Experimental Study in Developing History Reading Ability with Sixth Grade Pupils through the Development of an Active History Vocabulary," *Journal of Experimental Education*, VII (September, 1938), 19-23.

A report on an attempt to determine the relation of growth in ability to use the language of history in written expression and the ability to read history material in which the expressions and patterns of language are found.

563. STAPLES, ARDEN. "A Reading Program for the Social Studies," *Arizona Teacher*, XXVII (January, 1939), 137-39.

A plea for, and an example of, co-operation among teachers of reading, geography, and history in the upper elementary grades.

564. WILDS, MARION E. "Science an Integral Part of the Social Studies in the Primary Grades," *Educational Method*, XVIII (December, 1938), 119-21.

A plea for a closer integration of the so-called "social studies" (including science) and an example of how it may be achieved

GEOGRAPHY¹

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The following list was derived from a canvass of material published since August 1, 1938. It includes those publications which seem to be the more helpful, significant contributions.

565. BAKER, EMILY V. "Diagnosing Children's Ability To Use Maps," *Journal of Geography*, XXXVII (September, 1938), 227-31.

Describes a test which enables the teacher to check the map-reading abilities of sixth-grade pupils.

566. BURNHAM, ARCHER L. "Place Names in Fourth-Grade Geography," *Journal of Geography*, XXXVIII (March, 1939), 117-20.

Describes an investigation of eight fourth-grade, one-cycle geography textbooks to discover what place names occur therein.

567. COLE, GAYLE C. "An Experiment in Integration," *Journal of the National Education Association*, XXVIII (February, 1939), 46-47.

Describes the activities of an eighth-grade travel club.

¹ Item 501 (*Newer Practices in Reading in the Elementary School*) in this list contains an article of importance for geography: Dwight Curtis, "Reading as It Functions in Fifth-Grade Geography."

568. CORFIELD, GEORGE S. "The Out-of-Doors, Geography's Natural Laboratory," *Journal of Geography*, XXXVIII (May, 1939), 195-99.
Discusses the many opportunities for field work in rural communities which will aid children in gaining correct geographical concepts.
569. "Geography Outline for Grade Three," *Catholic School Journal*, XXXIX (April, 1939), 129-30.
Presents a unified outline of work for all third-grade classes and makes many suggestions for working out the units.
570. GLUCK, HAROLD. "The Use of Toy Projection Aids in the Teaching of Geography," *Journal of Geography*, XXXVIII (February, 1939), 58-62.
Tells how to obtain, at small cost, equipment for use in visual education.
571. HAHN, H. H. "The Teaching of Home Geography," *Journal of Geography*, XXXVIII (January, 1939), 1-8.
Discusses procedures in work in "home" geography which may parallel textbook work and provide experiences helpful in the geographical interpretation of other parts of the world.
572. HANDEL, HAZEL G. "The Use of Dramatization in Junior High School Geography," *Journal of Geography*, XXXVII (December, 1938), 351-57.
Discusses dramatization as a teaching device.
573. *New Era in Home and School*, XIX (November, 1938), 259-95.
The whole issue is devoted to geography. The articles of special interest to elementary-school teachers include the following: "Geography in Education and Citizenship," by Leonard Brooks; "Geography through Contact," by J. B. Dempster; "Geography in the French Primary School," by E. Reynier; "The School Geography Broadcasts," by G. F. Williams; "Human Ecology: Man and His Environment," by E. Estyn Evans; "Some Suggestions for the Geographical Study of a Local Area," by D. Wilford; "The Pioneer Survey of a School District, Lambeth," by Valentine A. Bell; "Blundell's School Survey Club," by W. W. French; "Regional Survey in School," by J. Leonard Oliver; "An Experiment in Outdoor Geography" by Elizabeth Chubb.
574. NOLEN, LUELIA C. "Check Lists for Use by Teacher and Pupil in the Evaluation of Geographic Tools," *Journal of Geography*, XXXVIII (May, 1939), 205-8.
Gives criteria by which both teacher and pupil can evaluate the use of geographic tools.
575. PARROTT, HARRIET SUSAN. *Relating Geography to the Life and Experience of the Child*. New York: Silver Burdett Co, 1938 Pp. 32.
Points out the value of an "orientation unit" at the beginning of each grade as an aid in relating geography to the life and the experience of the child.

576. REYNOLDS, BRENTON E. "Values Achieved through Theory-Experiment Clubs," *Ohio Schools*, XVII (January, 1939), 8-9.
Gives an account of the activities of eighth-grade geography clubs.
577. SHRYOCK, CLARA M. "Gradations in Map Learning," *Journal of Geography*, XXXVIII (May, 1939), 181-87.
Discusses some of the causes of poor map reading and suggests ways of guiding children in the development of map-reading abilities.
578. STEWART, ESTHER. "Reading and Geography," *Texas Outlook*, XXIII (January, 1939), 30-31.
Cites reading abilities which students of geography should have.
579. STRAIN, WARREN. "The 'New' Geography," *Peabody Journal of Education*, XVI (July, 1938), 26-30.
Suggests effective ways of stressing geographical relationships.

Educational Writings



REVIEWS AND BOOKS NOTES

FEDERAL TAXATION AND THE FINANCING OF PUBLIC EDUCATION.—This research¹ is concerned with the relation of federal taxation to the problem of financing education in the states. To this end a technique is devised whereby estimates may be made of the proportion of total federal tax revenue which rests on, or is drawn from, the economic resources of each state, as opposed to being collected in the state. This device is then applied to the several states for three biennia: 1928 and 1929, 1932 and 1933, and 1936 and 1937.

The resulting data reveal important shifts in the distribution among the states of the mounting burden of federal tax collections. Just previous to the depression 37 per cent of the federal tax load rested on the resources of the six richest states as compared with 33.5 per cent in 1936 and 1937, while the proportion of federal taxation drawn from the six poorest states increased during the same period from a little over 4 to nearly 6 per cent. Federal tax revenue drawn from the six richest states increased only 33 per cent between 1928 and 1937, while in the six poorest states the increase was 97 per cent during the same period. The corresponding percentage increases in the twelve richest and the twelve poorest states were 36 and 86, respectively, between 1928 and 1937.

On such data a major finding of the investigation rests, namely, that the problem of financing public education in the United States during the depression was greatly complicated by the rise in federal tax collections and particularly by the fact that this mounting federal tax load rested in increased proportion upon the states least able to finance their schools.

Professor Chisholm examines the significance of this conclusion from several angles, only a few of which can be dealt with here. He raises the question whether in spite of federal tax policies the poor states are able to support their schools adequately. The answer is found in data which indicate that these states, even with superior effort, are able to finance education only at a much lower level than does the country generally. The question is also asked whether increased federal expenditures, which involve federal aid to the states for various public services, have indirectly aided education by lightening the load which state and local taxation would otherwise bear. The conclusion is that, if such indirect aid has been enjoyed by education, it has been insufficient to permit school expenditures to hold their place with expenditures in general. In spite of

¹ Leslie L. Chisholm, *The Shifting of Federal Taxes and Its Implications for the Public Schools*. Journal of Experimental Education Research Monograph, No. 1. Madison, Wisconsin: Journal of Experimental Education, 1939. Pp. 84.

larger enrolments and other increased burdens placed on the schools, educational expenditures were 16 per cent lower in 1935 than in 1928, as were local expenditures in general. Total public expenditures, however, were up 18 per cent in the same period, mainly because federal expenditures increased 72 per cent.

The scope of the study did not include an investigation of the distribution of federal funds to the states during the period under consideration. It would be significant to know whether the poorer states received a decreasing or an increasing portion of federal funds distributed for various public services.

The final conclusion of the investigation is that, in the future, possibilities for adequate financial support for education in the country as a whole will be significantly affected by three factors: the general level of economic prosperity, the amount of tax revenue collected at the federal level, and the policy affecting federal aid for education. For a majority of states federal aid for education is essential if adequate support is to be provided, and particularly so if the federal government is to continue to deplete the tax base of the states by enormous tax collections.

Professor Chisholm's study is of first importance. His figures reveal dramatically some of the effects in one important area of public service—education—which have followed upon recent federal fiscal policies. The federal government has used its superior taxing power to raise greatly increased revenue, which it has seen fit to siphon into selected areas of public enterprise. It has left other public services to shift for themselves through the use of state and local taxation facilities resting on an economic base that has been shrunk, first, by lowered general income and, second, by enormous amounts raised by federal taxation. Under this program increased federal spending has resulted, on the one hand, in great inflation of the public services which the federal government has chosen to favor and, on the other hand, a serious deflation of other services, some of which, such as education, are of primary importance to the general well-being. The situation has been still further complicated because the federal government has raised its tax revenue by means which have placed increasing proportions of the burden on the states least able to pay, with a resulting widening of interstate disparities in the provisions made for schools.

Professor Chisholm's pioneer investigation deserves study by students of school finance and of public finance in general. The *Journal of Experimental Education* deserves commendation for making it available.

JOHN K. NORRIS

Teachers College, Columbia University

A GOOD IDEA GONE WRONG.—'The book under review' is a most comprehensive treatment of activities in the elementary school. The author has encompassed the literature; little or nothing of importance has escaped his notice.

¹ Harry C. McKown, *Activities in the Elementary School*. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xx+474. \$3.00.

When the reader lays the book aside, he feels that from some Olympian point of vantage McKown has surveyed the whole field of public education in the United States, that he has appraised every activity and, with few exceptions, has found each activity good for the elementary school.

In addition to the chapters on objectives, organization, supervision, administration, and financing of activities, the author has included chapters on each of the following: home-room activities, school clubs, the assembly, physical recreation, school trips, music, dramatics, manners and courtesy, social events, training in thrift, publications, drives and campaigns, promotion events, as well as a chapter treating a miscellaneous assortment of some twenty types of activities. The author calls this publication "a book to be read, re-read, and referred to time and again for ideas relating to specific activities" (p. ix). It has some of the qualities of a manual of reference: it is comprehensive, well organized, and easy to read. Attention is given to purposes or objectives and to appraisal or evaluation of activities. The treatment generally is commendable for its practical understanding and common sense.

Wherein do we find this book lacking? It is colored too much by things as they are and, therefore, points backward rather than forward. In every chapter it bears the marks of the extra-curriculum movement in the secondary schools of the 1920's. Where the author has no data for an activity in the elementary school, he treats the evidence from the secondary school and surmises that the activity will be good at the elementary level. Even where he has the evidence on an activity in the elementary school, too often his interpretation is in terms of secondary-school practice.

While he accepts the principle that activities may, and in the future probably will, grow out of the regular curriculum program, his treatment throughout is primarily that of an extra-class activity.

This book is useful, but it would have been infinitely more useful had the author taken the position that all activities in the elementary school should grow out of the needs and the interests of the children concerned and, therefore, should be an integral part of the curriculum program. Let us hope that he will direct his talents to collecting the material for such a book to supersede this one that he has written so well.

J. CAYCE MORRISON

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INCOLCATING DEMOCRACY.—Another "little book" on educational theory is offered the student or the interested layman who is concerned with the problem of educating for democratic living. Perhaps as reliable a way as any to orient one's self to the present volume is to think of it as the most recent in the series of "little books." In order of publication these are: William H. Kilpatrick's *Remaking the Curriculum* (Newson & Co., 1936), B. H. Bode's *Democracy as a*

¹ I. L. Kandel, *Conflicting Theories of Education*. New York: Macmillan Co., 1938. Pp. xiv+278.

Way of Life (Macmillan Co., 1937) and *Progressive Education at the Crossroads* (Newson & Co., 1938), and John Dewey's *Experience and Education* (Macmillan Co., 1938).

There is a sense, however, in which Professor Kandel's treatment of the problem of democratic education is distinctive. The fact that he is a student of the history of education is evident in his constant reflection on the historical counterparts of contemporary problems as a means of lending perspective. The fact that he is a student of comparative education allows him to present the common problems of educating for democracy as approached by England and France as well as by the United States. His specific knowledge of educational practice in the totalitarian countries gives him an opportunity to set the contrast with convincing and colorful detail.

The book is indeed replete with evidence of the historical mind. The treatment of the salient elements in the conflict between the liberal and the autocrat benefits from a historical evolution. Likewise the curriculum, methods, and concomitant theories of learning are not merely stated; they also are made to evolve out of a rich and changing past. Perspective is thus gained by learning to look with Professor Kandel at the problems of modern liberal democratic education in terms of what has gone before, the past being used to instruct not only by analogy but by the derivation of basic principles underlying truly democratic education.

One of the admirable principles which is made to grow out of this careful consideration of the backgrounds of American education is the respect for the golden mean. One cannot close the present volume without having grown convinced of the directionless quality of the Rousseauian, self-expressive, child-centered school on the one hand and of the socially and psychologically unsound character of the autocratic, subject-centered school on the other. Similarly, one learns that freedom is not just abandon but a condition characterized by controls thoughtfully achieved by the individual in behalf of the fullest social and individual development. Finally, one learns that the school cannot remake society on the one hand, nor should it be content with mere transmission of the established pattern on the other. Positively, then, how could one characterize the democratic education which shuns extremes? Professor Kandel does not hesitate to say:

The function of education [is] to enable the pupils, through content selected for that purpose, to understand the environment in which they live, to cultivate breadth of interests, to gain the ability to find information for themselves, to develop the capacity for judgment, to acquire an appreciation of standards of right and wrong, to be stimulated to a readiness to work and co-operate with others, and to be initiated into the art of living [p. 127].

In the face of the strong bid for world-supremacy on the part of the totalitarian states, we must remember that "a democratic scheme of education has just as strong an obligation to develop a body of common traditions, loyalties,

and interests as the basis for community life. . . . The essential task, however, is to inculcate a moral fervor and faith in democracy" (p. 165).

Even one of generous mind may find reason to hesitate a moment here before going forward with the author to inculcate the democratic quality of mind; for, even though one may be willing to inculcate democracy, to inculcate democracy as characterized by "standards of right and wrong" must give one pause. This plan may be the quiet door through which are slipped the permanent, unchanging standards—the absolutes of Professor Kandel's brand of democracy. Presently it is recalled that the author has said, "The task of the teacher is to discover, in an age such as the present, what are the permanent values and what are the values that are changing" (p. 46). These values, it is presumed, are to be discovered through being objective, that is, by holding one's self as free as possible from any particular point of view, for this course is recommended for the teacher who is beset with a number of conflicting psychologies of learning. "Under these conditions the only course for the teacher is to be eclectic" (p. 114).

We read further that ". . . there will always remain certain permanent values which education must cultivate, such as intellectual honesty, love of truth, ability to think clearly, moral qualities . . ." (p. 124). Here, too, the instrumentalist and relativist will feel inclined to part company with the author of this indisputably significant volume, for the suspicion grows that the author himself is still something of an absolutist.

EVERETT J. KIRCHER

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THE SAFE AND ECONOMICAL TRANSPORTATION OF CHILDREN TO SCHOOL.—In the United States each school day more than three million pupils are transported to and from school in more than eighty thousand vehicles at an annual expenditure of more than sixty million dollars. Future consolidations of one-teacher schools and mergers of existing high schools in rural areas will no doubt add several million more pupils to the transportation load of the schools. Experience has amply demonstrated that just any kind of transportation will not suffice. Pupils must be transported properly, safely, comfortably, expeditiously, and economically. How this objective may be reached is presented in readable fashion by Reeder in his recent book¹ on pupil transportation.

Transportation of pupils by motor bus has developed largely since 1920. During that time many aspects of transportation have been subjected to analysis, a vast amount of experience has been accumulated, and a sizable amount of literature on the subject has been produced. Reeder has assembled, digested, organized, and interpreted the researches, the practices, and the opinions in the field of pupil transportation and has produced a guidebook, interspersed with

¹ Ward G. Reeder, *The Administration of Pupil Transportation*. Columbus, Ohio: Educators' Press, 1939. Pp. xii+200. \$2.50.

CRITICAL REVIEW OF RECENT TESTS AND RELATED WORKS.—What is new in mental testing? What is a good test for a particular purpose? How can one find out about the tests available? This reviewer has been asked these questions frequently. Better answers than he, or any one person, is able to give are now to be found in Professor Buros' guide to the selection and the evaluation of tests and of works on tests and testing.¹ This book continues and expands the functions of the same author's previous summaries of educational, psychological, and personality tests. It contains bibliographies and reviews of recently published tests, of books on measurements, research, and statistical methodology; and of reports on regional testing programs.

The largest section of the book is devoted to a bibliography and to reviews of the tests published in the English language during 1937 and the first four months of 1938, and of some other tests published previously. The bibliography is not limited to the minimum essentials for identifying a test but is a rather complete description, including such items as forms, cost, time, and age range. When available, references are given to the construction and the validation of the tests. The evaluative reviews of the tests are of special significance. These were written by a large number of specialists in tests and testing. While it is true, however trite to say so, that the reviewers do not always agree perfectly in their evaluations, nor with the opinions of others who might have contributed reviews, this disagreement is inevitable in any reviewing project. There is a minimum of contradiction on matters of major significance. The main source of variation is on points of emphasis. It is safe to say that it would be extremely difficult to secure so long a list of more competent reviewers.

The sections devoted to measurement books and to books on research and statistical methodology are similar to the section on tests, except that the reviews of books consist of excerpts from previously published reviews in journals. The section on reports of regional testing programs consists mainly of complete bibliographical references and short descriptive notes. Only one critical review is included.

The appearance of this volume makes it unnecessary for prospective users of tests to guess which tests to use or to ask others for equally bad guesses. Likewise, users of tests should be less at the mercy of the sales "ballyhoo" of test-publishers. These statements do not mean that all the relevant or necessary information concerning any test is available in this volume; but, if it is not, the reason usually is that the information is not available—and making the information available is, after all, the responsibility of the publishers and the authors of the test. If test-users will take this volume as a guide, they will make fewer mistakes than they would by using any other readily available source. It is even more important that such use should have a wholesome effect on the future publication of tests.

¹ *The Nineteen Thirty Eight Mental Measurements Yearbook of the School of Education, Rutgers University*. Edited by Oscar Krisen Buros. New Brunswick, New Jersey: Rutgers University Press, 1938. Pp. xiv+416. \$3 00.

The information on books will probably be of less value than the section on tests because of the fact that this material is already available in other sources. Compilation of the information into a single volume will, however, add to the convenience of making the best possible use of it. As convenient references the directory of periodicals, the directory of publishers, the index of titles, and the index of names amply justify the space given them in the book.

It is a small matter, but this reviewer believes that the title involves too broad use of the term "mental measurement." It is true that using the phrase to include the measurement of ability, intelligence, aptitude, education, achievement, subject matter, personality, character, and vocational aptitude can possibly be justified. There is, however, a general tendency to use the term more narrowly.

The editor is to be commended for the idea of producing such a volume, for enlisting the co-operation of such a large number of competent reviewers, and especially for sticking to his guns in the face of objections from publishers and authors concerning certain evaluations of tests. Educators will look forward to the regular appearance of similar volumes in the future.

HOWARD EASLEY

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

- BEALL, ELIZABETH. *The Relation of Various Anthropometric Measurements of Selected College Women to Success in Certain Physical Activities*. Teachers College Contributions to Education, No. 774. New York. Teachers College, Columbia University, 1939. Pp. viii+68.
- BINGHAM, N. ELDRED. *Teaching Nutrition in Biology Classes: An Experimental Investigation of High School Biology Pupils in Their Study of the Relation of Food to Physical Well-being*. Teachers College Contributions to Education, No. 772. A Lincoln School Research Study. New York: Teachers College, Columbia University, 1939. Pp. viii+118.
- BUTTERFIELD, OLIVER M. *Love Problems of Adolescence*. Teachers College Contributions to Education, No. 768. New York: Teachers College, Columbia University, 1939. Pp. viii+212.
- CLARK, JOHN R., OTIS, ARTHUR S., and HATTON, CAROLINE. *Primary Arithmetic through Experience*. Yonkers-on-Hudson, New York: World Book Co., 1939. Pp. xiv+218. \$1.40.
- COLE, MARY I. *Cooperation between the Faculty of the Campus Elementary Training School and the Other Departments of Teachers Colleges and Normal Schools*. Teachers College Contributions to Education, No. 746. New York: Teachers College, Columbia University, 1939. Pp. xii+254.

- HANSBURG, HENRY. *An Experimental Study of the Effect of the Use of the Print Shop in the Improvement of Spelling, Reading, and Visual Perception*. Teachers College Contributions to Education, No. 776. New York: Teachers College, Columbia University, 1939. Pp. viii+84.
- HARRISON, M. LUCILE. *Reading Readiness*. Boston: Houghton Mifflin Co., 1939 (revised and enlarged). Pp. viii+256. \$1.40.
- HOLLAND, KENNETH. *Youth in European Labor Camps*. A Report to the American Youth Commission. Washington: American Council on Education, 1939. Pp. xiv+304. \$2.50.
- JOHNSON, B. LAMAR. *Vitalizing a College Library*. Chicago: American Library Association, 1939. Pp. xviii+122. \$2.00.
- MACBEEKEN, A. M. *The Intelligence of a Representative Group of Scottish Children*. London: University of London Press, Ltd., 1939. Pp. xvi+144.
- Scottish Primary School Organization: Age-Grade Classification, Time Allocation to Subjects*. Publications of the Scottish Council for Research in Education, XIV. London: University of London Press, Ltd., 1939. Pp. 82.
- Social Education*. Stanford Education Conference. New York: Macmillan Co., 1939. Pp. viii+312. \$1.75.
- Studies in Arithmetic. Reports on Investigations Relating to Present Practice and Teaching Methods in the Primary School*, Vol. I. Publications of the Scottish Council for Research in Education, XIII. London: University of London Press, Ltd., 1939. Pp. xx+144.
- TAPE, HENRY AARON. *Factors Affecting Turnover of Teachers of the One-Room Rural Schools of Michigan*. Teachers College Contributions to Education, No. 773. New York: Teachers College, Columbia University, 1939. Pp. viii+86.
- WADE, NEWMAN A. *Post-primary Education in the Primary Schools of Scotland, 1872-1936*. London: University of London Press, Ltd., 1939. Pp. xvi+276.
- WALLIN, J. E. WALLACE. *Minor Mental Maladjustments in Normal People: Based on Original Autobiographies of Personality Maladjustments*. Durham, North Carolina: Duke University Press, 1939. Pp. vi+298. \$3.00.
- WILSON, MARTHA. *School Library Management*. Sixth edition revised and rewritten by Althea M. Currin. New York: H. W. Wilson Co., 1939. Pp. 170. \$1.25.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL
TEACHERS AND PUPILS

- BROOME, EDWIN C., and ADAMS, EDWIN W. *Our Democracy*. New York: Macmillan Co., 1939. Pp. x+466. \$1.32.
- DURFEE, BURR, and McMORRIS, HELEN and JOHN. *Mateo and Lolita*. Boston: Houghton Mifflin Co., 1939. Pp. 62. \$0.92.
- GROVE, GLEN ARNOLD. *English Elements and Principles*. Revised by Charles Chandler Parkhurst. New York: Prentice-Hall, Inc., 1939. Pp. xii+498. \$1.96.

- HIGHAM, C. S. S., and HIGHAM, M. M. B. *Makers of the Commonwealth*. Discovering History Series, Book IV. London: Longmans, Green & Co., Ltd., 1939. Pp. iv+252. \$1.10.
- HINMAN, ROBERT B., and HARRIS, ROBERT B. *The Story of Meat*. Chicago: Swift & Co., 1939. Pp. xii+254.
- MCCLURE, C. H., SCHECK, CHARLES C., and WRIGHT, W. W. *The Background of Modern Nations*. Chicago: Laidlaw Bros., 1939. Pp. 512. \$1.44.
- McMACKIN, FRANK J., MARSH, JOHN A., and BATEN, CHARLES E. *The Arithmetic of Business*. Boston: Ginn & Co., 1939 (revised). Pp. x+486. \$1.48.
- McMURRAY, FLOYD I. *Pathways of Our Presidents*. Indianapolis, Indiana: Bobbs-Merrill Co., 1939. Pp. 224. \$1.28.
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THE SCHOOLS AND THE STRIFE OF EUROPE

IN THE months and perhaps the years that lie ahead, the American people will be faced with momentous decisions in the area of foreign relations. It will not be easy to chart our course in a war-torn world. Conflict always arouses emotions, and the present conflict in Europe is particularly well calculated to do just that. There is grave danger that we may be caught up in the currents of emotion and swept into decisions which will serve neither our own best interests nor the interests of civilization. As never before, the United States is the world's great hope for a "humane and democratic order among men." If this hope is to be realized, America must resolutely set itself the task of perfecting its own democratic institutions and of preparing itself for the role it should play in world-reconstruction when the war is over. As the Educational Policies Commission has so well expressed it, "when peace comes again, as come it must, the people of the United States ought to be prepared to play their part, sanely, bravely, and generously, in the process of rebuilding a world-order from which the threat of war and violence may be removed. Those who are to fulfil that mission can approach their task best if their

hands are unstained by blood, their spirits uncorroded by hatred, and their minds uncrippled by months or years of wartime regimentation."

The war has brought special problems to teachers in most American classrooms. Fortunately the Educational Policies Commission has come forward with a statement of policy that should prove extremely helpful to teachers and administrators everywhere. The document, from which the following paragraphs are quoted, is entitled *American Education and the War in Europe*. The publication can be obtained for ten cents from the National Education Association, 1201 Sixteenth Street, Northwest, Washington, D.C.

The policies recommended here rest upon the fact that the United States is at present a neutral nation. It is the conviction of the commission that under present conditions the American people will make their greatest contribution to the protection and survival of democratic values by refraining from military participation in the struggle in Europe. All future decisions affecting American neutrality should be reached by full use of democratic methods. These methods, which are in fact the essentials of the educational process, include full access to the facts, unfettered discussion, tolerance for conflicting opinions, and concern for the general welfare. Our foreign policy should not be one of drift, but of deliberate action growing out of democratic procedures. At the present time, America can make no greater contribution to the well-being of humanity than to place before the world the stirring example of a democracy in action in a crisis. . . .

In such circumstances there are several courses of action open to those in charge of the educational program. One possibility is to forbid discussion of such issues in the school and in other activities under the control of the teacher. Another possibility is to give free rein to the discussion of this question with neither guidance nor stimulation on the part of the teacher.

An adequate sense of professional responsibility will not approve either of these extremes. Neither repression of discussion nor abdication of responsibility is an appropriate policy for American education. At such a time as this, the schools should serve as centers of community deliberation with reference to the pending issues. They should not evade any question which is pertinent to a better understanding of the international situation and of America's relation to it. The education of a free people should know no undebatable propositions. Confusion, ignorance, and indifference are not the same as impartiality.

This is not to say that every class every day must discuss international trends or that the emotions of little children should be harmfully overstimulated by contemplation of the horrors of modern warfare. So to disrupt the orderly process of education is neither desirable nor necessary. But in classes dealing

with such subjects as contemporary social and economic problems, current events, geography, history, foreign languages and literature, due provision should be made for a sane and realistic use of present events as material for study, illustration, and analysis. Literary and debating societies, forums, assemblies, lecture courses, history clubs, and the like should also be active in this field.

In this field, as in others, the central task for teachers and other educational workers is to change conflict of opinion into a search for truth and for a wise course of action. The first requirement in this process is to provide that, with due regard to the maturity and interests of the learners, all viewpoints receive a hearing before an attentive and open-minded audience.

More important still, the resources of scholarship should be drawn upon to lend depth and significance to discussions of international questions by youths and adults. For example, the modern concepts of nationalism, the political and economic aspects of modern warfare, the question of population pressures in relation to economic resources, the historical roots of the present conflict, and similar questions are seldom fully appreciated by the general public. The peculiar function of education is to place beneath the headlined surface of current events a background of knowledge which will check irrational prejudices, enrich discussion, and lead to wise decisions.

All individuals and governments involved in the war are naturally anxious to be absolved before the world of responsibility for starting and continuing it. The claims presented by both sides, on these and other issues which will arise as the war progresses, should be submitted to rigorous examination. They should be checked for accuracy, completeness, and bias. Reference and reading materials should be abundant and diversified. At such a time as the present the schools can be of great usefulness to the country in teaching adults and children to make that distinction between "mere rumor" and "verified fact" which the President of the United States recently urged upon the American people. . . .

Those in charge of the education of American youth and adults should guide all discussion of international issues consistently toward the supreme question of their bearing on the long-term welfare of the American people. This welfare cannot be narrowly conceived. The American people inhabit one part of an interdependent world. While everyone is entitled to an opinion regarding the rights and wrongs of the present European struggle, the public schools and other educational agencies of the United States have no obligation to defend the interests of either side. They do have an obligation to be concerned unremittingly with the meaning of that conflict for the long-term security and happiness of America.

In carrying forward a program such as has been described, it should be made clear by word and action that the schools are not partisan. They are carrying out their proper, *normal*, democratic function of supplying the processes and materials upon which a prudent public opinion can be formed.

HERE AND THERE AMONG THE SCHOOLS

ITEMS selected for reporting in this issue of the *Elementary School Journal* have to do with occupational classes for elementary pupils of low ability; innovations in the teaching of art, music, and literary expression; and the procedures employed in making a core curriculum in the junior high school.

Occupational classes for the retarded boy and girl Frank W. Ballou, superintendent of schools in Washington, D.C., has recently made available a course of study for occupational classes in the elementary schools of that city. These occupational classes are designed to take care of that type of retarded child who by reason of mentality or circumstance is unable to profit by regular academic high-school experience. Members of these classes are boys and girls from Grades V and VI, thirteen years of age and over, with intelligence quotients ranging from 74 to 89. The curriculum is "planned to provide such basic experiences, activities, and counseling as will make living more meaningful to the child and give him some power to stand alone and function successfully in the community according to his abilities." It is not the purpose to prepare these youths to enter the field of the skilled trades but rather to cultivate the skills and aptitudes which may enable them, if possible, to transfer to the vocational schools.

The general and specific objectives of the course are stated as follows:

GENERAL OBJECTIVES

1. To educate the child so that he will be able to take part in the world's work.
2. To endeavor to have the child appreciate social, civic, and cultural values.
3. To develop worthy social attitudes and behavior.
4. To know how to achieve physical efficiency and desirable mental attitudes.
5. To help the pupils to become better citizens through the study of problems and activities of home and community life.
6. To adjust the education to the abilities, aptitudes, and interests of these children.
7. To train for the desirable use of leisure time and recreational interests.
8. To develop through the practice of manual skills a knowledge of their significance.

SPECIFIC OBJECTIVES

1. To provide opportunity for occupational training for boys and girls in the elementary school.
2. To provide opportunity for the development of skills in the use of tools and materials in accordance with individual aptitudes and capacities.
3. To train for wiser selections of work within the child's ability
4. To provide training in simple household techniques.
5. To help the child to select wisely as a consumer.
6. To stress the need of good management as an important factor in life-situations.
7. To make more effective the training in the fundamental subjects of education through occupational activities.
8. To develop a feeling of confidence in themselves and pride in their work.
9. To build up proper attitudes toward work and to develop good habits of workmanship.

The curriculum calls for units of work in civics, English and reading, arithmetic, social studies and science, music and arts, and health. Provision is also made for laboratory work.

A rather detailed course of study has been prepared. It should prove helpful to administrative officers and teachers in other school systems who may be interested in providing this type of educational opportunity for handicapped youth.

Art, music, and poetry as enrichment experiences One of the significant developments in elementary education in recent years has been the increased attention given to art, music, poetry, and dramatics as forms of creative activity and self-expression. From various parts of the country we receive reports which indicate a widespread and growing sensitivity to the value of activities of this kind. From Catharine Gunn, of the Board of Education of St. Louis, Missouri, we have received the following account of a new program of art instruction which was initiated in St. Louis last year.

Special art classes for elementary-school pupils of unusual talent which were opened by the St. Louis Board of Education last year are proving successful, Superintendent of Instruction Henry J. Gerling thinks. The classes have been satisfactory both from the standpoint of the work done by the children and from that of interest stimulated.

A survey of children above Grade IV was made last year by art supervisors and classroom teachers, and in each school were found, on the average, two

pupils unusually gifted in art. These children have been given the opportunity to attend special art classes for one two-hour period each week.

No set curriculum is used in the classes, and instruction is as individualized as possible. Pupils study a large number of graphic-arts media, including water colors, tempera paints, charcoal, and colored chalk. Clay-modeling is taught to children especially gifted along that line, and wood and stone are provided for those with a bent for carving.

Dorothy McPherson, elementary-school supervisor in Coffeyville, Kansas, reports that in the schools of that city there are well-directed programs in both music and art. A volume of original poems written by elementary-school pupils has been published, and a volume of original stories is in preparation.

W. A. Bass, superintendent of schools in Nashville, Tennessee, also writes that steps are being taken to lay the foundation for a good music program in the schools of Nashville, running from the first to the twelfth year. A director of elementary-school music has been appointed to supplement the work of the general music supervisor.

Guidance in planning a Under the general direction of C. J. Dal-
core course in Grade VII thorp, superintendent of schools of Aber-
deen, South Dakota, a committee of
teachers has prepared a mimeographed bulletin entitled "A Core
Course in the Making—Co-operative Plans and Procedures." Clara
N. Flemington, director of homemaking, served as general chairman
of the Core Course Committee. The chief value of the bulletin for
teachers outside Aberdeen is that it illustrates the plans and pro-
cedures used by a group of teachers in developing a core course.

This particular course is designed for Grade VII of the junior high school and is developed around the central theme of home living. The general purpose of this experiment in curriculum modification is described as follows:

The bulletin is not a course of study. It represents rather preliminary thinking necessary before developing a core course. The tentative content which it suggests for such a course has been prepared by committees of teachers in the form of source units. These are under separate covers. The source units are for teachers only, and include much suggestive material which should be helpful in developing teaching units with pupils in actual classroom situations.

This core course which the Aberdeen group is attempting to build has as its

main concern helping boys and girls solve the basic problems which they meet in everyday living. This group has been conscious that one of the major deficiencies evidenced in education at the present time is the fact that many of the subjects as now taught have too little relationship to the real life problems which pupils face. It is possible that the experiences which teachers have planned for pupils have been too narrowly compartmentalized with the result that much which is formally taught in the classroom is not carried over into real life. It is also evident that the problems, interests, and needs of boys and girls are not found in the separate subjects but cut across many fields. In real living situations we use materials from different areas, not separately, but as a whole. And further, we have come to believe that only as learning is used does it take on real meaning.

In the building of the core course herein described, there has been an attempt to break down subject-matter barriers and to unify the teaching of art, music, science, health, industrial arts, and home economics around real problems which boys and girls meet in everyday life. The pupils' immediate needs, interests, and concerns have been carefully studied as well as their attitudes, appreciations, habits, and skills which parents and teachers, with their maturity of judgment, have considered desirable. . . .

The purposes of this experiment in curriculum modification in the seventh grade of the junior high school may be tentatively stated as follows: (1) to unify the teaching of music, art, science, health, industrial arts, and home economics around a central theme of home and family living in the Aberdeen community, (2) to eliminate duplication of content and activity in these fields; (3) to reorganize the teaching of the separate subjects to make their contributions to the general education of boys and girls at this level more functional.

A NEW TEST FOR APPRAISING TEACHERS

THE following statement is quoted from a recent issue of the *New York Times*.

For the first time in the history of American education a comprehensive battery of examinations is being designed especially for use on a nation-wide objective basis in testing candidates for teaching positions.

With the aid of a grant from the Carnegie Foundation, the American Council on Education has organized a teacher examination project in line with a growing belief that this might well be the next great step in the improvement of education in this country.

The first examinations will be ready for use next spring and probably will be given in eight or ten centers of the East and Middle West to begin with, according to Dr. Alexander J. Stoddard, superintendent of public schools of [Philadelphia], who heads the council's National Committee on Teacher Examinations.

Dr. Stoddard said today that the committee's purpose was not to provide a

"teacher selection" but rather a "teacher examination" service, and that there was no thought of depriving local school superintendents of autonomy in the choosing of their own teaching staffs. . . .

"It is the purpose of the committee," Dr. Stoddard said, "to develop a three-fold service. First, a battery of carefully constructed tests will be prepared and made available to the cities co-operating in the experiment. . . .

"Second, the committee will give all possible assistance to the co-operating schools in the study and exchange of ideas directed toward the improvement of all other means of selecting candidates, including investigation of the so-called 'imponderables.'"

"A third aspect of the service is that data will be made available for research in teacher education. Such research may be carried on either by the staff working under the direction of the committee or by teacher-training institutions taking part in the project."

The 1940 examinations, requiring about six hours of actual working time each day for two days, will be given in the co-operating cities on March 29 and 30, and the committee will report the results to superintendents and candidates before May 1.

The tests are to include (1) "examinations that may be required of all candidates, on the theory that admission to the profession in any capacity should be restricted to those above a certain minimum in intelligence, culture, and professional knowledge," and (2) "examinations to show mastery of subject matter to be taught." . . .

The second group of tests is to be divided according to elementary- or secondary-school positions, with elementary-school candidates taking a two-hour examination on "elementary-school achievement" and the high-school candidates taking two ninety-minute tests selected from the following subjects: language and literature, social studies, general mathematics, biological sciences, physical sciences, French, German, Spanish, and Latin. . . .

"Only two hours of the total examination time of twelve hours," [Dr. Stoddard said], "will be devoted directly to strictly professional education subject matter, and in this two-hour unit the emphasis will be placed on common fundamentals. While this examination unit will give an indispensable index, in comparable terms, of the candidate's professional literacy, the superintendent's staff will make an independent judgment of the whole training and experience record of the candidate which will have considerable weight in determining the position of the candidate on the eligibility list."

LIGHT ON THE TEACHING OF PHONICS

Few problems in American education have occasioned so much difference of opinion as the use of phonics in the teaching of primary reading. Experimental investigation has rendered no conclusive results with respect to the value of phonetic training. Some

hold that training in phonics is harmful in that it tends to isolate words from their meaningful function, to lead to the neglect of context clues, to sacrifice interest in the content of reading, and to narrow the eye-voice span. Others hold that training in phonics results in greater speed and comprehension in both oral and silent reading and that it encourages correct enunciation and spelling. This disagreement with respect to the value of phonics not only is found among investigators and textbook writers but is also reflected in the attitudes of the rank and file of teachers. Many teachers believe that extensive training in phonics is highly desirable, while among others the impression prevails "that phonetics is a disgrace, that this phase of instruction is of no value and is generally being abandoned."¹ Under these circumstances teachers everywhere should welcome the appearance of probably the most definitive study that has yet been made on the value of phonetic training. The study was made by Donald C. Agnew and was published by the Duke University Press under the title *The Effect of Varied Amounts of Phonetic Training on Primary Reading*. We quote herewith some of the conclusions of Agnew's study.

THE RELATION OF THE INVESTIGATIONS TO THE CONTROVERSIAL
ISSUES WITH REGARD TO PHONETIC INSTRUCTION

In chapter 1 the arguments for and against phonetic training were summarized. The investigations reported in the present study present evidence that has direct bearing on a number of the arguments.

The investigations have tended to support four of the arguments in favor of phonetic training. These arguments are that phonetic training when given consistently in large amounts (as in Durham): (a) increases independence in recognizing words previously learned, (b) aids in "unlocking" new words by giving the pupil a method of sound analysis, (c) encourages correct pronunciation, and (d) improves the quality of oral reading. The investigations provided no evidence on the other arguments in favor of phonetic training.

The study tends to show that a number of the objections to phonetic training have been exaggerated. In other words, although the investigation offered opportunity for evidence in support of these objections, such evidence did not appear. There was no evidence that large consistent amounts of phonetic training tend: (a) to sacrifice interest in the content of reading, (b) to result in the neglect of context clues; (c) to result in unnecessarily laborious recognition of

¹ Nila Banton Smith, *American Reading Instruction*, p. 220. New York. Silver, Burdett & Co., 1934.

unfamiliar words; and (d) to be unnecessary because the advantages attributed to phonetic training might be obtained without formal training. Some positive evidence indicated too that (e) phonetic training does not narrow the eye-voice span.

On the other hand, there are some data to show that large amounts of phonetic training tend to slow up oral reading. This is, in a sense, counteracted by greater accuracy in oral reading.

The investigations did not reveal striking differences in silent-reading ability as between groups having large differences in amounts of phonetic training. There was no evidence that phonetic training decreases efficiency in silent reading. This may be due to the fact that speed in silent reading is largely acquired in the grades above the primary level. Further investigation would be necessary in order to determine the effects of this early training on silent reading in the advanced grades. . . .

EDUCATIONAL IMPLICATIONS

Should phonetic methods be employed in the teaching of primary reading? The answer to this question can be given only when the purposes of teaching primary reading have been agreed upon. If the basic purpose in the teaching of primary reading is the establishment of skills measured in this study (namely, independence in word recognition, ability to work out the sounds of new words, efficiency in word pronunciation, accuracy in oral reading, certain abilities in silent reading, and the ability to recognize a large vocabulary of written words), the investigations would support a policy of large amounts of phonetic training. If, on the other hand, the purposes of teaching primary reading are concerned with "joy in reading," "social experience," "the pursuit of interests," etc., the investigations reported offer no data as to the usefulness of phonetic training.

It is possible that the aims of primary reading should embrace all these purposes. If this is true, the relation of phonetic training (and the abilities resulting from phonetic training) to these other purposes would have to be determined before the place of phonetic training in primary reading instruction can be ascertained.

ANNOUNCEMENT OF A NEW EDUCATIONAL PERIODICAL

THE University of Texas announces that members of the staff of the School of Education will soon launch a new educational periodical, *Education Today*. Assisted by a six-member advisory committee composed of members of the School of Education, J. G. Umstattd, curriculum department chairman, will assume the editorship of the new magazine.

Designed to keep before its readers a comprehensive view of the American educational scene, the new magazine announces that one

of its specific editorial policies will be to provide a medium for interchange of ideas between the United States and Latin America. We extend our best wishes to this latest arrival in the field of educational journalism.

THE STATUS OF CHILD LABOR IN THE UNITED STATES

A BULLETIN with the title *Child Labor Facts, 1939-1940* has been prepared by Gertrude Folks Zimand and published by the National Child Labor Committee. The following paragraphs point out the trends in child labor since 1930 and present an estimate of the number of children employed today.

The exact amount of child labor at the present time is very difficult to determine. Census figures are always unreliable as the end of the decennial period approaches, but during the years since 1930 there have been more than the usual factors influencing the extent of child employment, especially for children under sixteen years. The most important of these are:

1. The general unemployment situation which has operated to curtail the employment of children as well as of adults.
2. The N.R.A. codes which abolished child labor in many industries for a two-year period (1933-35) and whose effect in this respect continued to be felt after the codes were terminated.
3. The Wages and Hours Act of 1938 which practically eliminates child employment in industries which ship goods in interstate commerce
4. Other federal measures such as the Walsh-Healey Act setting labor standards for work done under contract for the government and the Jones Sugar Act of 1937 which makes the prohibition of child labor a requirement which sugar-beet growers must meet in order to secure benefit payments.
5. The enactment of state laws in several important industrial states setting a sixteen-year age minimum for employment during school hours.
6. Technological changes in industry which operate to discourage the employment of immature workers.
7. Changes in state education laws and improvement in educational facilities which tend to keep children in school until a later age.

Considering all of these factors, and also the trend in child labor as revealed by work-permit figures and as seen in field studies conducted by the National Child Labor Committee and other organizations, the best rough estimate that can be made at the present time would place the number of children under sixteen years gainfully employed somewhere between 750,000 and 900,000.

These children can be classified in three groups:

1. *Agriculture*.—By far the greatest number, probably between 500,000 and 600,000, are employed in agriculture. This figure is considerably higher than

the 1930 Census figure, which . . . was taken on April 1 and did not include children employed in agriculture at other periods of the year. These children are not merely giving casual assistance on the farm. The Census specifically states that its report on children gainfully employed in agriculture does not count "children working at home, merely on general household work, on chores, or at odd times on other work." Gainful employment includes only "an occupation by which the person who pursues it earns money or a money equivalent, or in which he assists in the production of marketable goods."

The recent increase in the number of migrant agricultural families, especially in the West Coast states, may bring this number even higher.

2. *Intrastate employment.*—Industrial occupations probably utilize from 60,000 to 80,000 children under sixteen years, including both full-time workers and those who work outside of school hours. This figure might include a very small number employed in manufacturing work which is not interstate in character. The great bulk, however, would be children working in primarily intrastate industries such as retail stores, bakeries, beauty parlors, garages, repair shops, hotels, restaurants, theaters, offices, bowling alleys, domestic service, etc.

3. *Street trades.*—Street traders under sixteen years—newsboys, magazine salesmen, bootblacks, peddlers, etc.—form another large group, probably numbering from 250,000 to 400,000. The wide variation in this estimate is due to the fact that the great majority of "street traders" are boys selling and delivering newspapers and there is a discrepancy in figures as to their number compiled by the International Circulation Managers' Association in 1934 and in 1938. At the hearing on the child-labor provisions of the Newspaper Code in 1934, the International Circulation Managers' Association presented an estimate of 250,000 newsboys under sixteen years, of whom approximately 125,000 were under fourteen years. More recently, in connection with the possibility of coverage of newsboys under the Wages and Hours Act, it ventured an estimate of 500,000, of whom 175,000 were under fourteen years. Some newsboys under fourteen years may be removed from employment, and some of those fourteen to sixteen years may have their work regulated by operation of the Wages and Hours Act, but a recent ruling of the Federal Children's Bureau, based on an opinion of the solicitor of the Department of Labor, makes it unlikely that any large number will benefit by this protective measure.

PROGRESS IN THE EDUCATION OF NEGROES

THE following statement is quoted from a bulletin of the United States Office of Education, *Statistics of the Education of Negroes, 1933-34 and 1935-36* (Bulletin No. 13, 1938), prepared by David T. Blose, associate statistician, and Ambrose Caliver, senior specialist in the education of Negroes.

Data presented in this report indicate that remarkable progress has been made in the education of Negroes during the quadrennium from 1933 to 1936, in spite of the depression; also remarkable progress is shown (where historical data are given) during the preceding two decades. This is especially true in the number of high schools and in high-school enrolment. For example, many of the southern states have more public high schools and a larger public high-school enrolment now than all the southern states combined had twenty years ago. The fact that 84 per cent of the Negro children six to fourteen years of age were enrolled in school in 1930 as contrasted with 58 per cent in 1915 indicates that more schools of all types are being provided Negroes. The difference in these two percentages (which probably is greater for 1935-36) really represents a more dramatic story than the mere figures indicate. Among other things it represents a growing appreciation of Negroes of the value of education in the solution of many problems which confront them. . . .

From the increase in enrolment indicated above it would appear that considerable progress has been made in that direction.

That definite results have accrued to Negroes by virtue of increased school attendance may be seen from the reduction of illiteracy from 30 per cent in 1910 to 16 per cent in 1930; and by the increase in the percentage of Negro children who remain in school beyond the fourth grade from 18 in 1921 to 30 in 1936. . . .

While the per capita expenditures for both races have increased tremendously in twenty years, in general the divergences between the two races have not lessened, and in some states they have increased. However, public support of education for Negroes has grown at a rapid rate. In 16 states in 1915 the expenditures for Negro teachers' salaries amounted to \$5,860,876. In 1935 the corresponding expenditures in 17 states amounted to \$29,500,747. Twenty years ago there were 64 public high schools for Negroes; in 1935 there were 2,305. In 1915 the property valuation of 16 land-grant colleges for Negroes was \$2,576,142 and the annual income was \$544,520; 20 years later the respective amounts were \$12,549,300 and \$4,301,307 (17 institutions). . . .

While many of the facts presented in this report indicate great progress in the education of Negroes, an analysis of many others reveals considerable inadequacy of educational facilities and opportunity. Negroes must not only make educational progress in comparison with their own past record if the nation is to benefit from the development of their potentialities, but they must also make progress in comparison with the accepted standards and goals, locally and nationally.

In 1935-36 the average annual salary of all Negro teachers was \$510; for all Negro elementary-school teachers, \$439; and for Negro teachers in regular and vocational high schools, \$814. In 1915-16 the annual average salary of Negro teachers in the eight southern states for which data were obtainable was \$149.50.

In 1935-36 in ten states the annual cost (based on current expenses) per Negro pupil in average daily attendance was \$17.04. For white children in these same states it was \$49.30. The range for Negro children is from \$8.75 in Georgia to \$69.96 in Missouri. For white children the range is from \$28.86 in Arkansas to \$78.23 in Maryland.

THE SCHOOL-BOARD MOVEMENT IN ILLINOIS

IN A mimeographed bulletin entitled "The School-Board Movement in Illinois as a Major Factor in Public Education," Herbert B. Mulford describes some significant phases of the current work of the Illinois Association of School Boards. Two developments, described in the following paragraphs, are of particular interest.

An appropriation of \$15,000 by the state to the Illinois Association of School Boards, authorized by the recent session of the general assembly and approved by Governor Horner, provides funds, which, together with the usual income of the association, should be sufficient to vitalize the work which the leaders of the movement have in mind. So far as is known, this is the first instance in the history of American education where such tangible recognition has been given to associated school boards. It suggests at once faith on someone's part that a job in Illinois education can be done by school boards in co-operation with each other and in the light of their own common experiences in practical educational effort.

An appointment has been made of an education-trained school administrator to serve as research director and field secretary of the association. It is too early to state with exactness what this director at the start will ascertain as the first and most important problems of school boards in Illinois, or how long it will be before recommendations coming from numerous school-board contacts will find their way into practical and effective application in educational procedure. The chief thing that can be said at the moment is that recommendations should flow from needs and not from preconceived ideas of a limited few in the field of school-board work.

WHO'S WHO FOR DECEMBER

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HOW MUCH FREEDOM SHOULD BE GRANTED TO PUPILS TO CHOOSE THEIR EXPERI- ENCES IN LEARNING?

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*

THE question, "How much freedom should be granted to pupils to choose their experiences in learning?" implies that the answer is a matter of degree. It would probably be as difficult to find an educator willing to defend the proposal that pupils should have no voice in choosing their experiences in learning as it would be to find one who would defend the position that pupils should have complete freedom of choosing their experiences in learning. We can, at the outset, free ourselves from the dichotomy of an "either-or" situation. As Dewey¹ has pointed out, schools, like mankind in general, frequently attempt to remedy a bad practice by proposing an opposite practice. Suppression of pupils' freedom to choose any of their learning experiences has resulted in such deadening formality that it is perhaps not surprising to find some educators proposing that the only cure for this situation is granting pupils almost complete freedom to make their own programs. While the practice of rushing to opposite extremes is understandable as a common expression of emotional reaction, a solution to educational problems is seldom found on the emotional level. Some intelligent analysis of the situation is likely to produce better results.

When such a question as that discussed in this article is under consideration, it is important that we avoid prejudices or commitments to assumptions which thoughtful analysis will not warrant. For example, because the word "freedom" embodies so much that is desirable and so many of the objectives of a democratic way of living, there is a tendency to say that freedom is always good no matter what the circumstances. However, we must not assert that

¹ John Dewey, *Experience and Education*, p. 1. New York. Macmillan Co., 1938

pupils should have freedom in choosing their experiences in learning simply because, in general, freedom is a desirable characteristic.

Other terms unavoidably link themselves with this issue. Schools in which there has been little freedom of choice have been numerous in the past, and this limitation of freedom is frequently mentioned as a characteristic of "traditional" schools. Furthermore, in educational discussions, at least among certain groups, to characterize a practice as traditional is to condemn it at the start. That is, for some persons the word "traditional" implies all that is bad, just as with other persons the word "freedom" implies all that is good. Yet a fair analysis must show that there are times when freedom of action is not a desirable characteristic and also that there are many traditional practices which are so sound that our social structure rests upon them. *There are many situations in life in which the values of individual freedom are subordinate to the values of social good.* Likewise, there are traditional practices which are bad and traditional practices which are good. The fact that they are traditional has nothing to do per se with whether they are good or bad.

Other terms which invariably tie themselves with this discussion are the words "conservative" and "progressive," and here again rather violent prejudices or attachments are aroused. Because, in the schools of the past, limitations of pupil freedom have been pronounced, proposals which look toward a limitation of pupils' freedom of choice in selecting their learning experiences are likely to be labeled as a conservative tendency and, in the minds of some, thereby condemned. Likewise, because in a few radical school situations complete freedom of pupil choice has been permitted, proposals to give pupils greater freedom of choice are labeled progressive proposals and are thereby considered to be good by a segment of the teaching population. That is, the question proposed is likely to be decided in terms of the assumptions ordinarily attached to certain terms rather than on the basis of the merits of the case.

In reference to the question with which this article is concerned, I have no disposition to be influenced by either conservative or progressive commitments. In the real sense of the term, anyone is a conservative who believes that society has accomplished some things worth conserving, and probably no reader of this article would deny

that position. On the other hand, everyone is a progressive who has faith enough to believe that education can be improved and who throws his energies into a forward-looking movement in that direction. It is doubtful whether any educator would fail to avow such a faith. It is only when organized pressure groups try to claim our allegiance that we abandon our sober and independent thinking and subscribe to one extreme of an "either-or" controversy.

Let us then wipe the slate clean of any prejudices attached to the terms which are necessarily employed in the present discussion. We have no -isms to defend, either conservatism or progressivism. The one issue here is: Which is a better school, that in which pupils have a larger share in selecting their learning experiences or that in which pupils have a smaller share in selecting their learning experiences? The answer must be tested by experience.

The amount of freedom which should be permitted pupils in choosing their learning experiences cannot be settled by reference to any *a priori* principles. If freedom brings good results, it is good; if it brings poor results, it is of doubtful value. Freedom and restriction are best understood in relation to each other. There are positive values in both freedom and restriction. A perpetual vacation brings boredom; perpetual work is slavery. Vacation is enjoyable in contrast with work; work is stimulating after a long vacation. Likewise, freedom to choose is not recognized as freedom except in contrast with some restraint. The oft-repeated comment of the child who said, "Teacher, do we have to do what we want to today?" is an apt illustration.

Even if complete freedom of choice of learning experiences by pupils were desirable, it would be impossible to achieve so long as schools follow the group organization which now characterizes them. Even those schools which go farthest in permitting pupil choice necessarily accede to the view of the majority of pupils, and the minority is expected to adjust to the choice of the larger group. Our answer, then, must fall someplace between complete freedom of choice for the child and complete restriction of children's choices by teachers.

It will be worth while to build up some perspective for dealing with this problem. Intelligence and understanding are necessary to

make good choices. Immaturity and the incompleteness of their education place limitations on children's intelligence and understanding. When society was simple and when children could see most of the activities connected with living, their understanding was proportionately large as compared with their understanding in a complex society, particularly one in which science and technology have removed many significant activities from the observation of children. When life was simple and there was less to be learned, the opportunities of intelligent choice were greater. Not so many years ago Bacon was ambitious enough to attempt to include all the worth-while knowledge in the world between the covers of a single book, and in his *Novum Organum* he achieved considerable success in that attempt. Since his time the field of knowledge has, of course, expanded enormously. Learning first broke up into moral philosophy and natural philosophy. Moral philosophy then split into many branches, such as philosophy, metaphysics, epistemology, and logic. Still later the humanities and the social sciences represented special developments of this general field of knowledge, and, as represented in present programs of study, the humanities and the social sciences are further subdivided into subjects, such as history and language, economics and political science, anthropology, and geography. Likewise, natural philosophy split in an even more amazing fashion than did moral philosophy, and the whole field of science with its many subdivisions and ramifications has developed.

One can now find high schools in which 200 or 250 different courses are offered, and it is not uncommon to find in our major universities between two and three thousand different courses. Since in the face of this expanded program of education the elective system seemed the only possible outlet, we have for some decades struggled with the difficulties inherent in that plan. The elective system represents freedom of choice by students of their learning experiences. Educators are few indeed who would hold it an unqualified success. In fact, the elective system seems to be approaching breakdown at present, and the failure of teachers and school administrators to grapple with the problem of determining what learning experiences are best is a clear example of escaping professional responsibility. Present experiments in the direction of determining a program of

general education are a recognition of the folly of so great a freedom of choice as is represented by the elective system at the high-school and the college levels. Failure to synthesize and to integrate the expanding body of knowledge has forced on the students a choice which they were unprepared to make. In the elective system experience has provided one answer to our question, although the answer comes at the secondary and higher levels of education. The question proposed in this article, however, is probably more commonly thought of in terms of the elementary school and its program.

We should recognize that in some respects society grants to pupils no choice whatever in matters of education, and there are probably few indeed who would take exception to the position which society has assumed. For example, society gives pupils no choice about becoming literate; children are compelled by law to attend school and to learn what is necessary to overcome illiteracy. In the second place, we should note that schools, even radical schools, give pupils little choice in matters of antisocial behavior. Schools of today, even more than traditional schools, make pronounced efforts to set up situations in which social rather than antisocial attitudes are formed and in which democratic ways of living rather than the opposite are customary. It is quite apparent, therefore, that we all restrict freedom of choice in those situations where we are fully agreed on what the outcome should be.

Within the school program there is usually little choice afforded pupils in respect to the major objectives of education. One would look far to find a school in which a child who chose not to learn to read or not to learn to write would be permitted to go on indefinitely in that direction. Some postponement may be granted but nothing more. There are few schools which would permit first-grade pupils, if it were their choice, to study trigonometry or chemistry or any similar advanced field of knowledge. That is, in questions of the major strategy of laying out an educational program, the issue of pupil choice is not discussed to any great extent. The issue is commonly encountered after the major objectives of education have been defined. Assuming that learning to read is one of the aims of education, the question becomes: Shall we let pupils choose concrete experiences relating to this objective? Or, as perhaps a better ex-

ample, within the general objective of developing desirable personality traits: Should we let pupils choose the activities through which these traits may be developed?

It seems to me that the answer to the main question is related to the particular objectives of education. In the schools of the past these educational objectives were too narrowly limited to subject matter. One of the marked contributions of the progressive wing in education has been the calling to the attention of schools the importance of the development of personality as contrasted with an almost complete absorption in the mastery of subject matter. The development of personality is just emerging into its proper sphere in education. Here is a clear case where the "either-or" dichotomy is frequently encountered. One does not look far to find those who would advocate a large degree of abandonment of subject matter to make room for greater opportunity to develop personality. In some quarters content is held in such little esteem that the very term "school subject" excites a violent emotional response. "Activities" are preferable to subjects largely because, through activities, personality may be developed while subject matter is thought of as something remote from personality. The distinction between personality development and mastery of subject matter is brought to the foreground here because it is in these two directions that the chief differences of view in regard to the degree of pupil freedom in selecting learning experiences are encountered.

In the development of personality it is easy to see that freedom and initiative are not only desirable but are imperative. Docile behavior in imitation of adult patterns leaves no room for the development of personality. The very awareness of self comes through setting the self over against other selves. During that period in child life, from approximately age three to age six, when the social self of the child is emerging, this insistence on freedom of choice on the part of the child is so apparent that the period is often referred to as an age of stubbornness. Stubbornness in this period should be considered as a desirable rather than an undesirable trait. Only by assuming this degree of independent behavior is the child able to develop his sense of selfness. In later school experience the situation is somewhat similar. The child's personality characteristics

must emerge through relatively free behavior. If the child is to develop a personality which is his own rather than a copy of some adult model, he must, in the very nature of the case, be accorded a considerable degree of freedom. It is in the schools where the development of personality constitutes the primary educational objective that we find the greatest insistence on freedom of choice of learning experiences on the part of the pupil. To a great extent this freedom is entirely proper, but again it is a matter of degree, for even in the development of personality traits there must be consideration for society as well as for self. Such traits as unselfishness, kindness, generosity, sympathy, friendliness, sacrifice do not emerge from conditions of purely individual freedom of behavior. They emerge from restrictions on one's freedom of behavior for the sake of the larger group. Co-operation involves restriction of freedom more often than it involves unlimited freedom. A democratic way of life frequently may be fostered much better by well-selected experiences suggested to children than by such experiences as an individual child is likely to select for himself. In the development of personality there must be a large degree of freedom of choice of learning experiences on the part of the pupil but not a complete freedom of choice. If teachers learn anything in the process of being educated, they must have something to contribute to the immature child which will be superior to a program completely chosen by himself. Otherwise, why educate teachers?

Subject matter or content represents the accumulated intellectual and social experience. It is so profoundly important to any theory of education that only the most superficial thinker will discard it or treat it incidentally. In those aspects of education which always have been and always must be concerned with the accumulated racial experience, the child's ability to choose wisely his learning experiences is much more limited. Here social choice supersedes individual choice simply because the individual child is not in position to choose intelligently. One would need to deny the very value of education to hold that in these respects the uneducated can choose more wisely than the educated. Yet even in the field of subject matter there is opportunity for individual choice of learning experiences at the level of concretes, although the general pattern

and sequence of these experiences will afford the child little opportunity for choice.

Learning experiences chosen by teachers are frequently subject to criticism because the choices are poor, not because the teacher chose them. If pupils made the choices, they would, in general, be even more poor but for a different set of reasons. Pupil choices are poor because pupils are not in a position to distinguish the significant from the trivial. Teacher choices may be poor for the same reason but more generally are poor because teachers do not understand child nature and are not able to relate their choices to the normal experiences of childhood. The way to improve the situation is not to take the choice away from teachers and give it to pupils but rather to improve the basis for teacher choice.

This improvement will not come by harking back to outmoded doctrines of interests and instincts. The notion that children possess a fund of predetermined interests to which the school must adapt its work has suffered seriously at the hands of psychological research during the past two decades. Child choices can be exalted if one believes, as in the year 1913, in a list of some forty original or instinctive tendencies to which the school must adjust its work. But no psychologist would subscribe in 1939 to such a doctrine of native interests and instincts. Many interests which in 1913 were thought to be native have since been found to be the results of social environment. This change in the doctrine of interest has had profound effects on education, but there are many groups of educators who have not yet sensed its implications. If pupil interests are the products of society's interests, then pupil choices of experiences assume a less important role in educational theory. It then becomes a function of teachers so to understand both society and children that they will be able to stimulate wholehearted responses among pupils to experiences significant for the society in which the children live.

Under a doctrine of interest which, as related to the teaching of primary reading, told us that the principal interest of children was in "animalness," animal stories were a necessary kind of learning experience. Textbooks were full of animal stories. *The Three Bears*, *Little Red Riding Hood and the Wolf*, *The Little Red Hen*, *The Three Billy Goats Gruff*, etc., made up the classic literature for children.

However, when the basic reason for this interest in animals is sought, it is found not in any inherent or native interest leading in that direction but rather in the social environment of the time. In a pioneer society animals are very close to people. When bears and wolves constitute the dangers which children hear about from their elders, children become interested in bears and wolves. When chickens and cows and horses are common possessions, children are going to be interested in chickens and cows and horses. When society advances beyond the pioneer stage, the interests of children change. The interests of children in a city do not center in animals but rather in automobiles, airplanes, railroad engines, and the like. No longer do boys ride stick horses in their play; rather they are taking on, in their play interests, what seems to them to be important in the society in which they live.

The meaning for education of this new doctrine of interest is clear. Teachers must study society until they understand what is significant and what is trivial in human experience. They must translate into learning situations for children those things which are significant to society. But they must select learning experiences in such a way that the interests of children will be aroused. If teachers understand children intimately and if they sense real values in society, they will then be in a position to make to the learning experiences for children a contribution of far greater significance than children can make for themselves. The answer to the criticism that teacher choice of learning experiences is poor is not that teacher choices be abandoned but that teacher choices be improved.

In out-of-school situations children choose their own experiences. Some of these experiences are good, but certainly many are lacking in educational value. The entire argument for guidance and supervision is based on the idea that a superior environment may be provided by intelligent direction. Children have no inherent fund of wisdom for selecting wisely their learning experiences. Wisdom is a product of experience. The well-worn slogan that "the school should be like life" sounds well, but there is little truth in it. The only reason for having a school is to provide for children a superior educational environment, superior to that which life outside the school provides. The logical outcome of the argument for making

schools like life is simply to close them and have life. Yet it is well known that communities which have no schools breed illiterate members of society lacking understanding and lacking in all those experiences which the school prizes. The very essence of educational strategy is to set up a superior environment in the school. This superior environment is a product of the wisdom of those who have been educated. It is not a product of any instinctive tendencies or native interests which unerringly choose wisely when children are given freedom of choice.

The ultimate blame for the present undesirable character of the learning experiences provided for children must be borne by teacher-training institutions. Academic traditions as to what education should be must be broadened. In teacher training there must be a greatly increased emphasis on understanding children and on instruction which deals with child development. This instruction must go far beyond the sentimental child-study of the 1890's, and it must go beyond the subject-centered psychology of learning of the 1920's.

Teacher-training institutions are now in position to offer a much superior preparation of teachers than was possible two decades ago. Child-study has been broadened until, where it is sufficiently humanized, a genuine understanding of children may result. Narrow interest in a child's intelligence quotient has been broadened to include an understanding of the nature of mental functioning and the place that emotional experiences play, not only in motivating learning, but in arousing conflict situations from which the child's personality develops. If a teacher understands our social and intellectual heritage, understands the significant problems in the society of which the child is a part, and understands intimately the nature of children at various levels of maturity, she will then be in a position to choose learning experiences for the child which will be far more stimulating and significant than any child will be able to choose for himself. However, these experiences must be so chosen that flexibility in detail is possible and that opportunities for choice of concretes are still left with pupils.

There is every possibility of accomplishing this twofold result. Within every major learning experience, be it concerned with per-

sonality or with subject matter, there are many forms of approach. For every significant principle which is worth teaching in school, there are many concretes from which this principle may be developed. There is ample opportunity for freedom of choice of learning experiences which not only will afford the child a sense of freedom in his education but will afford opportunities for individual differences in choice among pupils in a given group. The zest of freedom of choice is not lost because the choices must fit into some generally approved educational pattern. Furthermore, such restriction of freedom is more typical of life-experience than would be unrestricted freedom in deciding "what we shall do today."

We do not feel pinched in the selection of personal behavior because of good laws set up by society. The outlining by teachers of a superior educational strategy and a good general pattern of learning experiences does not restrict in any undesirable way individual choices of learning experiences which are still possible within the general strategy and the general pattern set up. In fact, it is only by supplying to children some general pattern superior to one which they themselves are able to set up that their individual learning experiences may be directed into ways which are profitable to them.

The position taken in this article may be summarized as follows: Complete freedom for pupils to choose their learning experiences is utterly indefensible. Teachers cannot escape responsibility for wise planning. It is for this purpose that they have been educated. If teachers know their pupils intimately and if teachers know what is significant in present society and in the heritage of the past, they will then be able to provide a general pattern, within which pupil choices may be made, that will be significant and stimulating to children far beyond any that pupils are able to select for themselves. Wise teachers will leave as much room as possible for choice of detailed learning experiences within the general pattern that constitutes the school's major educational program. At the level of concrete details pupils' choice and initiative should be encouraged; very much in those activities which lead toward the development of personality, probably somewhat less in those experiences related to content that children still must learn.

Perhaps one or two examples will make the position held in this

article more clear. We have a rich heritage of literature within which are preserved accounts of human experience in almost complete variety. A broad acquaintance with this literature is essential for establishing social solidarity in a democracy. The literature may be graded in terms of the maturity of children. Parts of it are intensely interesting for children in the primary grades; other parts are not interesting until pupils reach adolescence. Within these parts there is a rich variation for every level of education. Assume that a teacher of junior high school children seriously sets out to understand her pupils' characteristics, not only from a study of the scientific literature relating to them but from many contacts with their experiences, their conversation, their play interest, their problems. Assume also that this teacher through diligent study becomes familiar with the literature which is adapted to the interests and the problems of the children in the junior high school. If she reads this literature broadly until she knows in concrete detail those books which deal with experiences of interest to her pupils, she is in a far better position to suggest learning experiences, that is, books to be read, than the children are to select their own books. Let us assume that the general educational strategy of this period provides that children should be familiar with much of this literature. The position of this article is that, while children may be provided considerable leeway in selecting from readings recommended to them, the teacher is in a position to direct their choices in a far more valuable way than the children can exercise their own choices. Children should be free to select their reading, within limits. The limits should be thought of not in negative but rather in positive fashion. The function of a list recommended by the teacher is not to restrict the reading of children; rather it is to stimulate interest by providing reading experiences which only by the rarest chance a child might discover or choose by his unaided efforts.

If one were to go outside the field of academic content and select an illustration in the field of personality characteristics, other examples could be found where teachers with an understanding of child behavior are able to suggest modes of social participation which are more likely to bring about desirable personality development than are the activities that pupils themselves are able to pro-

pose. The key to these superior social programs is again an understanding of the nature of social participation in the world at large plus an understanding of child nature at the level at which the programs are presented to children. Much freedom of choice of learning experiences remains for the child but always under the general pattern which a superior adult experience is able to contribute.

There is little promise in a program completely chosen by the pupil or in a curriculum completely dominated by the teacher. There is every promise in programs planned by the teacher and supplemented by pupil choices provided (1) that teachers will really master the psychology of child nature and child learning and (2) that teachers will go beyond the limit of present organized school subject matter for the enrichment of curriculum possibilities. *A combination of intelligent guidance on the part of the teacher and freedom of selection on the part of the children is needed.*

We give much attention these days to the discussion of curriculums made up of a central core and supplementary materials. In terms of the present problem the central core may embody the general pattern which makes up the strategy of an educational program. The supplements to the central core may give opportunity for the freedom of selection by children and also make provision for individual differences. Through enrichment of the core program more freedom of choice is provided. But for teachers to try to escape the burden of hard thinking necessary to a wise selection of learning experiences by loading the problem on the children is a most abject declaration of intellectual and professional bankruptcy.

CRITERIA FOR EVALUATING INSTRUCTION IN THE USE OF LIBRARY MATERIALS

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PRACTICAL VALUE OF GOOD CRITERIA

ALL persons interested in improving instruction in the use of library materials in elementary schools need criteria that will actually work. Many excellent teachers find great difficulty in formulating criteria or in applying to their teaching the criteria given them. Yet the first step in improving any instruction is evaluation of the teaching, and such evaluation requires some kind of criteria or standards.

Significant general principles or criteria *can* be exceedingly useful for evaluating any instruction to which they legitimately apply. Often, however, they are not useful. Their chief theoretical advantage is that they can be few enough in number and yet can cover the pertinent instructional area sufficiently well to give the user a clear perspective and a sense of mastery in his evaluation work. In these respects they are unlike elaborate checking lists which, useful in their right places, are likely to overwhelm the user with details so that he loses sight of the relative importance of various elements.

The great theoretical advantage of criteria, however, is all too seldom realized in practice for two reasons. First, the criteria are not carefully enough worded so that their meanings are unmistakable to the users. Second, they are not accompanied with equally clear applications. It is easy to reel off a criterion verbally and assume that one can apply the principle to a practical situation whenever need for such application arises. When a practical situation does come up, however, one often finds that the criterion which seemed so promising in the mere word form is of little or no use in the concrete difficulty. The writer recalls a course in curriculum administration some years ago. One committee in a week did an apparently fine job

of preparing a platform of general principles for curriculum revision. For several years this platform was in demand by other classes and instructors and by school workers in the field who happened to hear of it. Other equally competent committees in the course, each for a specific subject, struggled for three weeks to show what differences the application of these principles would make in the course of study for the committee's subject. In the end these subject committees had far less feeling of certainty and satisfaction than did the general-principles group.

THE CRITERIA

The following criteria for evaluating instruction in the use of library materials in elementary schools (and instruction only) represent the writer's best judgment to date, based on years of observation, study, and experience in this area. No claim is made for infallibility of the criteria or for completeness of the list. The criteria have been highly useful to the writer in passing judgment within a reasonable time on the instruction for using library materials in a given school and for helping teachers. He has tried to write up the criteria so that their meaning and possibilities of application will be clear to others wishing to improve the library instruction in their schools. If any reader can make a better brief working list of criteria for this area, the writer will be the first to welcome the improvement.

1. *Instruction in the use of library materials is definitely limited by the educational philosophy of the particular school and should fit that philosophy.* Under a traditional course of study based on a few textbooks and supplementary readings, the library instruction will necessarily emphasize using parts of a book, increasing reading skills, and the like. In a progressive school pupils themselves can, in addition, scout for materials, make use of the library catalogue, get up bibliographies, and so on.

2. *The course of study in the use of library materials should provide:* (a) *a gradation of items to avoid unnecessary duplication and to allow for naturally increasing complexity of use, as in a dictionary or the library card catalogue;* (b) *study, examination, or testing of individuals to find exactly which pupils in a given grade (or room) need additional instruction and which do not.* These provisions are advisable since many of the same library knowledges and skills are needed through-

out many grades. As children come from homes with differing library facilities, some pupils will acquire these knowledges and skills far earlier than will others. Individual attention will therefore frequently be desirable.

3. *Each elementary grade (or room) should have a list of specific library knowledges and skills needed by the pupils in the work of that grade and in their outside life.* No teacher can, without some such list, have a systematic program for giving children the ability to use library materials effectively. Skill in the use of the library is one of the few abilities given by schools that will certainly be useful to children all their lives. It is, therefore, far too important to be given on any basis of "We don't know where we're going, but we're on our way."

4. *Definite and systematic provision should be made for giving to the children in each elementary grade (or room) the specific library knowledges and skills needed by them in that grade and in outside life at that stage.* Unless such provision is made, the knowledges and skills will never be taught. "What is everybody's business, is nobody's business."

5. *All teachers in any elementary school should, in all their instruction, give reasonable attention to creating lifelike situations requiring library knowledges and skills.* Such instruction should start from, and tie in with, the library needs of the pupils in all their school work and current outside life. Unless the instruction is so based, there is no ground for expecting any material transfer of library training to other activities of the pupils in school or outside or in later life. Teachers can follow this criterion by adopting such practices as the following: telling a pupil that he has so many misspelled words on a page but not telling him which words, so that he must use a dictionary; raising questions that interest pupils and letting them hunt the answers out of books instead of being told by the teacher; asking questions that can be answered from a given book without telling exactly where the answers are, so that the pupils have to use the table of contents and index; allowing pupils to help in ordering books for their rooms, so that they acquire valuable training in selecting and evaluating references.

6. *Every instructional offering of the school should be utilized to teach the pupil to use effectively the library materials that he needs in order to avail himself of that offering.* Formal instruction in the use of library materials, separate from other instruction, is of little value. While some separate instruction is useful for emphasis, application of it in all other instruction is the important thing. Pupils will no more learn to use library materials in isolation than they will learn, in the English classes only, to speak and write good English.

7. *The instruction should motivate the pupil to work for a greater mastery of more library knowledges and skills than he would ever desire without such instruction.* The pupil in his ignorance and inexperience cannot possibly know what he needs in the way of library knowledges and skills. What he does not know of them, he will never miss. But the teacher can bring him to see possibilities and to desire to attain them.

8. *The library provisions in any school should exemplify the saving of time and energy in enriching experience—the chief justification for furnishing library materials to pupils.* It is as true here as any place that preaching or precept without practical working example is futile.

APPLICATION OF CRITERIA TO AN ACTUAL SCHOOL SYSTEM

To clarify ways of applying the criteria in actual practice, consider a concrete situation in which the criteria have been applied by the writer. The particular school system has the following three available collections of library materials: (1) a junior-senior high school library, with a well-trained and competent librarian; (2) individual classroom library collections in the elementary school on an adjoining lot; (3) the public library, many blocks distant, subsidized by the school board, with a professionally trained staff which co-operates with the schools by buying certain reference books and children's books and by allowing each elementary-school teacher to take out ten books at a time for classroom use.

Judged by Criterion 1, the elementary school's instruction in using library materials is what would be expected in a school whose educational philosophy appears to be that of letting each teacher do

about as he thinks best. With regard to the use of library materials, the teachers in this school have done just that.

There are few indications of meeting the conditions of Criterion 2. With the exception of a short seventh-grade course given by the librarian, there are no signs of a gradation of items in instruction, study provisions, examination, or testing of individuals, in the use of library materials. In a few cases the librarian and certain elementary-school teachers have done excellent work on a few specific library knowledges and skills. They would have gone much farther in this good work had they not operated in separate compartments, almost as isolated as though they were in separate schools or even communities. For example, the only cumulative record of what pupils have read is kept for the high school alone, and even this record is discarded at the end of the year. Some of the charging systems of the elementary-school classrooms keep such a record for one year by the accession numbers of the books. Only by looking up these numbers, with the expenditure of a great deal of labor, would it be possible to know which books a pupil has taken out. This information will not be looked up by teachers under such conditions.

For meeting the requirements of Criterion 3 the school system has made no definite provision. Until these conditions are met, there will be no satisfactory basis for working out the library knowledges and skills section of the desired course of study.

As regards Criterion 4, there is no organized course of study in the use of library materials throughout the grades. The library instruction is whatever each teacher happens to wish to make it. Some teachers occasionally utilize the high-school picture collections, but there is no tie-up with the high-school librarian's resources and ability to help in using them in the elementary grades.

The school system could fully meet the conditions of Criteria 2, 3, and 4 by two procedures:

1. Working out a course of study for library instruction throughout the system.
 - a) Each teacher should specify the library knowledges and skills needed by his pupils to do the work of the grade and, as far as he can tell, in their outside life ¹

¹ The writer has, for some years, been working on a convenient check list to be used for this purpose by elementary-school teachers. This list has not been perfected to the

- b) Some one person should then consolidate and unify these lists and draw up a tentative course of study that will not duplicate instruction unnecessarily.
- c) This course of study should then be discussed with the teachers until a formulation is reached which they are ready and willing to teach.
- 2. Devising cumulative reading records (one for the elementary school and one for the junior-senior high school) by the librarian in conference with teachers.
 - a) This record should be on large cards or sheets and should go with the pupil so that his current teacher in the elementary school (or the librarian in the high school) can always see what he has read, when he read it, and how many books he read in a given period.
 - b) Desirable items for this record, which may be only a line to a book, are the date of completing a book or parts read, the author, the title, the grade in which the reading was done, and a few words on the pupil's reaction to the book—whether he liked it or not, and why.

Great improvement can be made in approaching the requirements of Criteria 5 and 6. Practices conforming to these criteria are one sixth-grade teacher's special work in reading, another sixth-grade teacher's instruction in the use of reference books, and a second-grade teacher's library "activity." Unfortunately, however, these practices appear to be sporadic and exceptional. In contrast to these projects is one room in which the library had temporarily been completely covered by screens to carry posters. In all the class work observed the writer did not find a single instance in which a question or an interest manifested by a child was being utilized by a teacher to lead that child to find the answer or to get more information by himself from library materials. The common practice in the elementary classrooms of displaying a wall chart of books read by the pupils, with its competition for public recognition, does not follow outside life. Outside school a person reads books because he wishes to do so or thinks he needs them. The motive in the competition observed is simply "to keep up with the Joneses," and there is no reason to believe that it will produce any appreciable growth in the ability to use books effectively.

point where it can be published and made available commercially, but he will gladly supply any elementary school with mimeographed copies provided that two specifications are met: First, for each blank used by a teacher, a duplicate checked by that teacher will be sent back to the writer. Second, nothing is to be done involving the publishing of any part of the list so as to interfere with the writer's later publication rights.

The procedures used in correcting papers handed back to pupils do not encourage the use of the dictionary. These procedures can be changed for the better by following the suggestions under Criterion 5. Furthermore, according to Criterion 5, the ordering of new books can well be made a co-operative project, which will give both teachers and pupils a better appreciation of library possibilities. It can be accomplished as follows:

1. Each teacher, in requesting new library books, can make up the list with the pupils, showing why each book is requested.
2. If any specified sum is allotted for a classroom, making the best possible list within that sum and taking advantage of all possible discounts and economies will bring in some practical arithmetic.
3. The list cannot be made up effectively without considering what books (and in what numbers) are already available in the classroom or can be borrowed from other libraries. This procedure will greatly increase the knowledge of the possible library facilities for all those participating in the project.

Probably the best way to motivate the pupil, as outlined in Criterion 7, is to meet the conditions set up by Criteria 5 and 6. The pupil will desire a greater mastery of library knowledges and skills when he sees how such mastery helps him in lifelike situations.

This school is far from adequately meeting the conditions of Criterion 8. The classroom collections are well housed in the library alcoves fortunately provided in the building. However, in no room are the books labeled on the outside completely and systematically so that they can easily be shelved in their proper places. In general the collections were not in good order when observed, and the library housekeeping, with few exceptions, was poor. This housekeeping varied with the individual rooms, a few collections having some semblance of order, others being practically rats' nests. In the bad rooms books were frequently put in upside down, piled sideways, and otherwise disarranged so that nobody could tell what was available or where a particular book was.

No room has an organized card file or similar record to show what the room possesses and where each book should go, with similar information on books in the high-school or the public library that have been found useful for that room. This lack is present despite the fact that the shelves of any book collection, except on the few occasions when every book is there and in right order, will show only the least

important items. The most important books will, of course, always be in use.

Effective charging systems, operated in turn by children who show interest and pleasure, have been set up in some rooms. These systems are operating with homemade equipment varying from a neat, business-like system to one kept on torn scraps of paper in a ten-cent-store filing case tucked away in a cupboard. In other rooms securing and returning books appears to be on a hit-or-miss basis.

This elementary school could meet the conditions of Criterion 8 fairly well by the following improvements:

1. A uniform scheme of numbering, labeling, and shelving library materials in the classrooms should be worked out and applied.
 - a) The books should be labeled so that they can be immediately shelved in the proper spots.
 - b) All books should be accurately shelved when not in use.
 - c) A simple uniform charging system with pupil librarians should be installed

The high-school librarian is thoroughly competent to lay out this plan after conference with the elementary-school teachers. Each teacher and his pupils can then carry it out for each room.

2. Each elementary classroom should instal a *card file*¹ showing all library materials used in that room during the year and where each is to be found normally. This file will give the teacher and pupils almost instant access to the library materials that they may need during the year. Using it will give pupils a training in using a library card catalogue that will be almost invaluable for further work with books.

¹ For directions for this file see Carter Alexander, "A Library Aladdin Lamp for the Classroom," *National Elementary Principal*, XVII (December, 1937), 69-71.

SHOULD AN INDIVIDUAL KNOW HIS OWN I.Q.? A MENTAL-HEALTH PROBLEM

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THE term "intelligence quotient" has filtered out of the technical literature into widespread popular use. For several years the average teacher has, with little hesitation, described his pupils in terms of their intelligence quotients. Many tests by which the intelligence quotient may be more or less mechanically determined are in use in schools throughout the country. It follows that an intelligence quotient based on one or another of the many tests is on record for a large percentage of the individuals who have come through the public schools in recent years or who are at present in the schools.

In an increasing number of cases pupils learn their own intelligence quotients. This knowledge is sometimes given them by teachers or school officials, or it may be obtained by chance. The important point is that a pupil frequently knows the intelligence quotient that appears on his record. Accompanying this knowledge there is, in the mind of the pupil and not infrequently in the mind of the teacher, a gross, generalized interpretation; for example, intelligence quotient 85, dull; intelligence quotient 108, average; intelligence quotient 140, genius or near-genius. This type of interpretation, with little or no additional understanding of the intelligence-quotient concept, carries with it a large degree of finality.

The problem treated in this article is: Should the pupil know his intelligence quotient? This question raises a practical educational problem. If the purpose of education is to develop to the greatest possible extent the potentialities of each pupil for achieving personal happiness and for contributing to the welfare and the progress of mankind, what bearing does knowledge of his intelligence quotient have on this educative endeavor? If it seems wise for the mature

individual to know his intelligence quotient, when and under what circumstances should he obtain this knowledge?

My experience with the adjustment problems of young men and women, particularly at the first-year college level, has brought me to the conclusion that a person's own opinion of his mental ability is of great importance in his adjustment to almost every aspect of life, especially if the opinion is obtained during preadolescence or adolescence, when all facts pertaining to the self seem to carry a charge of significance. Attitudes toward the self which are developed during this period become deeply rooted and have a marked immunity to reconstruction. Further, my case records lead me to the tentative position that a person's knowledge of his own intelligence quotient practically never promotes adjustment to any of his problems and that frequently this knowledge has a seriously damaging effect on wholesome development.

Of the cases that have come through my office, no statistical analysis has been made in an attempt to determine the number for whom knowledge of the intelligence quotient seems to have played an important part. As a rule, problems of adjustment are so complicated as to make this type of analysis wooden and meaningless. I have been impressed, however, with a number of particular cases in which the facts seem to indicate that the personalities of the individuals were deeply and perhaps permanently altered by their attitudes toward their intelligence quotients. Such case material is never entirely conclusive, but certainly it is suggestive. Three cases are described briefly in order to illustrate the nature and the significance of the problems involved.

F. T., when he first came to the adjustment office, was eighteen years of age, stood six feet and two inches, and, except for a certain tension and uneasiness, was a good physical specimen. He came because he was having difficulty with his school work, because he felt inadequate socially and was, in general, deeply discouraged and unhappy. He had a strong ambition to be successful in business and had registered for the business curriculum at the university. He had finished an unsuccessful first semester and was well into the second with even worse prospects.

It was difficult to secure an accurate estimate of his ability because whatever original ability he may have had was incusted with many years' growth of inhibitions, fears, and fatalistic feelings of mediocrity. From the very first con-

ference it was clear that he doubted the effectiveness of almost every aspect of his personality. After a few conferences the thing which seemed to be the central core of his feeling came to the open. Swallowing rapidly and working desperately to keep back tears, he declared that he might as well return home because he could never do anything that required university training—he was just an average boy.

The following facts came to light. F. T.'s grandmother was the only member of the family who had money. She had become interested in her two grandsons (F. T. and his cousin) and had determined to educate them. However, she did not wish to invest her funds unwisely. Hence, when the boys were ten years of age, she escorted them to the city to have them properly measured by a psychologist. The results of the test gave the cousin an intelligence quotient of 127, a "superior" rating. F. T., perhaps somewhat bashful by nature, a little slow, and very practical-minded, made a poor showing—an intelligence quotient of 106, duly interpreted as "just average." There was a note saying that F. T. would probably fail in any endeavor requiring more than average mental ability and that he would be happier and more successful if he engaged in manual or semiskilled labor. To grandma this verdict had all the weight of science behind it. Consequently she began to lose interest in F. T. and to shift all her attention and support to the cousin.

F. T. felt this shift and doubled his efforts to please his grandmother. These efforts were unsuccessful, and gradually, from comments dropped by the grandmother and other members of the family, the boy gained the impression that he was considered dull or, at best, average. When F. T. was about fourteen years old, it seemed wise that he be made aware of the "facts" concerning his mental ability in order that he "might face squarely his inadequacies and adjust to them," as is frequently and glibly advised in the literature. He was told the substance of the psychologist's report, and some years later when he left home, in spite of discouragement and ominous predictions, to work his way through college, he carried this doleful document with him. At the conference during which the facts related were presented, F. T. gave me the psychologist's report, hoping, he said, that the report might aid me in advising him.

The results of tests given him at the college level and such evidence as a prolonged study brought to light indicated that his academic ability was not especially high but was probably somewhere near, or slightly below, average for college students. However, little confidence could be placed in this evidence, for it was all deeply affected by his general maladjustment. In activities requiring practical ability (securing and holding a position to pay a part of his expenses, for example), he frequently manifested unusual ability.

I worked with this boy for a year and a half in an attempt to tear away his inhibitions and fears and rebuild his self-confidence. My efforts met with only fair success. Gradually he came to do satisfactory work at the university level, but always there seemed lurking in the corner of his mind the fear that perhaps

after all he was "short in the head," as he put it. The idea seemed to have been deeply imbedded in his personality; although intellectually he changed his attitude toward his ability, the old doubt returned with its inhibiting effect whenever difficult situations arose. The facts seem to warrant the conclusion that this young man had been permanently damaged.

The second case may be reported more briefly for in essence the facts are the same. M. L. came for consultation when he was in the final quarter of his senior-college work. He had acquired at the college an undesirable personal reputation. He was considered dogmatic, opinionated, argumentative, overbearing, unreasonable, alternately humble and pompous, erratic in his work, and frequently un-co-operative. He was ambitious and had planned from his early years to enter one of the professions. I had observed the young man indirectly for some months. Finally, in a conflict between a desire to enter a graduate school and a conviction that he would certainly fail there, he came for consultation.

After a brief period of defense, he told of his deep anxiety in regard to his ability. He reported that he never responded in class, never appeared on a program, never engaged in a conversation without the intrusion of the idea that perhaps he was mentally inferior. On being asked how long this notion had disturbed him, he replied that it had begun to upset him shortly after he left high school. M. L. had conferred with his high-school principal and was informed that his intelligence quotient was 92, that is, low normal. Again the figure carried with it the weight of a verdict supported by science. For four years this fact about himself had remained undigested in the young man's personality and probably had been centrally influential in the development of the negative traits already mentioned.

As measured by the 1937 Stanford Revision of the Binet-Simon Scale and by certain other tests, it seemed probable that the young man's intelligence quotient was somewhere in the neighborhood of 120. His graduation from college prevented further observation, but the fact that the information received at high-school graduation concerning his intelligence quotient had produced a deep effect on his personality seems indisputable.

The third case is that of a very bright boy, J. B. Everyone who has done adjustment work at the college level will have seen numerous students like J. B. He came to the office for three reasons: First, he was a prig and hence was roundly disliked by his fellow-students. Second, he made himself a nuisance by his irresponsibilities in the classroom and on the campus. Third, his work at the university was barely satisfactory. He breezed into the office and, after the passing of a few commonplaces, he remarked, without the slightest spark of humor, "I suppose you as a psychologist know that I am a genius." I could not refrain from replying that it was well for him to tell me since otherwise the fact might never be known. Still he showed no sign of humor and went on to relate how every pupil in the public school which he had attended had been given an intelligence test and that he had achieved the highest rating in the school,

namely, an intelligence quotient of 147, "which, as you know, means genius," he concluded. So far as could be determined, this intelligence quotient was approximately correct, but the fact had been seriously misinterpreted by the young man and had had an undesirable effect on his growing personality.

Certainly it would be unwise to conclude from such cases that an individual should never be told his intelligence quotient. Neither should one conclude that knowledge of the intelligence quotient was the only factor involved in these cases, although there seems to be little doubt that it was, in each case, a potent factor. As already stated, these cases are reported to illustrate some effects which knowledge of the intelligence quotient frequently produces.

Modern culture places great emphasis on mental ability. This emphasis is inevitable since in a highly competitive society there is a marked relation between mental ability and almost every phase of adaptability to life. The effect on personality of this emphasis is great. There are few terms more damning to an individual than the much used word "dumb" or its equivalent. On the other hand, a reputation for brightness or intelligence compensates for a multitude of undesirable traits. In more technical terms, a person's opinion concerning his own mental ability is at, or very near, the core of his ego organization; that is, his concept of his own ability is dynamically related to every other aspect of his personality.

Any fact intimately related to the self and to the adjustment of the self to its environment is important. The more emphasis a culture puts on a particular fact and the more the fact is related to individual adaptation, the more difficult it is for the personality to assimilate that fact. For example, a clubfoot does not present so much difficulty in adjustment as does a badly disfigured face. As the phenomenon increases in importance for the ego, the educational hazard increases proportionately. The danger that a personal attribute will cause personality trouble (unless proper and adequate assistance is given in the assimilation of the condition) becomes greater as the prestige and the security of the self are affected. If beauty of form and face is highly valued, then this quality will be of corresponding importance to the personality.

So long as a particular trait, quality, or characteristic is evaluated subjectively and varies, therefore, with personal opinion, a way of

escape is left for the personality. The individual himself and even perhaps his immediate associates may be able to hold their opinions in terms of their own frame of reference in respect to this quality. Consequently, when there is no accepted measurement available, the self may, more or less effectively, dodge reality or reality as it exists for the majority. To illustrate: At present there is no authoritative, widely accepted index for beauty of women; hence, within very broad limits the individual woman is able to maintain a reasonably acceptable ego level in respect to personal beauty. Owing to this quality's basic adjustment significance, it is one of the most difficult aspects of personal reality to which the developing personality must adjust, but the difficulties would be many times multiplied if science should present a method of measuring beauty which gave a widely accepted index of this quality.² There would be unchallenged, relatively constant beauty figures for the girls in the schools: Emma, B.I. (beauty index), 85, borderline ugly; Susan, B.I. 104, average; Juliet, B.I. 142, very beautiful.

Let us assume for the moment that the intelligence quotient is such an index for mental ability. It then becomes necessary for the personality to adjust to a scientific verdict relating to a quality that is basic to the self. The principal contentions of this article are (1) that to make a wholesome adjustment to such a fact when it is cast suddenly on the unprepared personality is almost impossible; (2) that one of the major responsibilities of an educator, whether parent or teacher, is to assist the growing personality to understand and properly to interpret the nature and the extent of its abilities; (3) that such understanding and interpretation can result only from a slow, gradual educative process reaching at least to maturity; and (4) that, if an individual is required to assimilate unassisted what seems to be a final fact about himself, his personality will be damaged. Therefore, it is well for the educator to keep certain principles in mind when securing and using intelligence quotients:

1. As yet, the complex psychological implications (and many

² It should not be thought that the author wishes to deprecate, in any way, the value of measurement. On the contrary, he firmly believes that progress in understanding personality depends, in no small degree, on adequate measurements. However, the problem of the proper use of clinical facts remains.

would say even the primary meaning) of the intelligence-quotient concept are not clear to leading students of the subject.

2. Whenever the intelligence quotient is used or interpreted, both the interpreter and the person receiving the interpretation should be aware of the limitations of the methods used in securing the figure.

3. The intelligence quotient is a clinical fact and, like other clinical information, is extremely valuable to the clinician. It must be used with due precaution and only for clinical reasons.

4. A clinical fact which to the mature adult may seem commonplace and ordinary (particularly if that fact pertains to another person), to the less mature personality may be deeply and permanently disturbing. Hence irresponsible or careless use of clinical facts may bring serious results.

5. The assimilation into the personality of a fact or a belief which relates to an important aspect of the self is never a simple process. The dictum (frequently met in the literature) that a person should see and face the facts about his mental ability is, at best, probably a gross oversimplification of the problem. The achievement of a wholesome attitude toward the nature and the extent of our abilities is one of life's most important and difficult tasks.

RELATIVE IMPORTANCE OF PLACEMENT OF MOTION PICTURES IN CLASS- ROOM INSTRUCTION

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IMPORTANCE OF MOTION PICTURES AS INDICATED IN EDUCATIONAL LITERATURE

THE motion picture is perhaps one of the most powerful agencies in society today. It has developed within the social program, according to Dale (1), three distinct functions: a means of escape, a method of diversion, and a means of providing insight. The most important function, as far as education is concerned, is the development of insight. Motion pictures may present a veritable and definite portrayal of man's habitat. They may offer a knowledge of the relationships of men. They may furnish a means of comprehending man's eccentricities. Since every person has the problem of interpreting the life around him, he attempts to acquire as many insights as possible into the reality of life. Herein the film proves to be of greatest value. McClusky states that "the power of the motion picture to develop behavior and attitudes in keeping with educational purposes would, if it were properly used, not only step up the intelligence of our citizenry both with respect to moral, social, economic, and political issues in this country but also with respect to world problems" (8).

Granted that the motion picture is a potent factor in the lives of people today, what contribution does it make to the children within the schools? This question is constantly in the minds of educators who are responsible for the use of films, of the persons who produce educational pictures, and of teachers who utilize movies in their classrooms. Koon and Noble (10) invoke further thought in this matter by their report that in 1936 more than ten thousand motion-picture projectors, silent and sound, were in use in schools.

How are these materials being used? What are the ultimate re-

sults? How great is the increase in knowledge, attitudes, appreciations, and skills because of the use of such teaching aids? These and other similar questions have been in the minds of educators and laymen for the past decade.

According to Holaday and Stoddard (5), the amount of knowledge acquired from films by children is significant. For example, these investigators prove that children in Grades II and III and older remember 59 per cent as much as superior adults and that the forgetting is slow. The same study indicates that children remember 90 per cent as much after six weeks as they did the day following the viewing of the film.

Teachers, however, have depended on the typical educational agencies—primarily on reading methods—for eliminating the cultural lag within the schools (2). In the typical classroom "there has been too much so-called 'teaching' and too little real learning" (4). How then can the motion picture be used to expedite learning?

Teachers "have failed to use the dramatic power of the motion picture to warm problems that are often intellectually cold" (2). They have failed to sense the value of teaching abstractions through the auditory and the visual stimuli which motion pictures offer. They have failed to capture the inherent interest which is ever present because of the dynamic power of motion within the pictures themselves. Teachers also have been especially consistent in their belief that available teaching films not only include much extraneous material but omit other materials of importance and significance (7). Thus the film has been used most often as entertainment, extrinsic of the unit of material being covered. The motion picture, therefore, has not been completely accepted by teachers as a medium of instruction.

The distinctive function of the teaching film is the portrayal of objects and events, the essential meaning of which are best understood when seen in motion. Motion pictures are explanatory in function, capable of giving instruction in skills, and suitable for sensitizing pupils to important social problems. A number of experiments have demonstrated that visual materials, and especially the educational films, have been effective in stimulating interest. They can, by expanding the area of concrete experience, compensate for the

limitations of language which may otherwise prove a hindrance to the development of interest (6).

Classroom teachers, however, more frequently write of the educational values resulting from the actual use of films; but their reports, upon analysis, commonly reveal merely subjective judgment and narrow or unsound concepts of the values. In an era of changing socio-economic and psychological goals of education, outcomes are still predominantly expressed in terms of a comparison between the capacity of the motion picture and of the textbook to impart specific items of information. In an era characterized by propaganda few questions are raised concerning the authenticity of the motion picture's presentation (3).

Granted that the motion picture is undoubtedly a great aid in the teaching of the course of study as outlined in the lesson syllabus and in the textbook, this use does not by any means exhaust its educational possibilities. May (9) predicts that, before many years have passed, the motion picture will rise from its present subordinate position as a "visual aid" to at least a co-ordinate position with the leading subject matter of the curriculum and that it will become an integral part of the course of study and be generally regarded as one of the indispensable elements in the curriculum.

PLACE OF THE MOTION PICTURE IN THE CLASSROOM

Despite the intrinsic value of the motion picture, there has been, and still is, an ever-present controversial issue of when pictures are of most value. No generalized statement can be made concerning this problem. The questions continue to be: How shall motion pictures be used to the best advantage? What should the children gain from the pictures?

Motion pictures may be used in the classroom to serve a variety of purposes. They may be shown as an introduction to a topic or a unit; they may serve to clarify the printed statements of textbooks; they may furnish a stimulus for further investigation; or they may be used to summarize material read in connection with a unit. In any event, motion pictures should lend interest and excitement to a topic because of their dynamic character. Motion pictures are alive; they hold the interest and the attention of children because of the movement on the screen.

PLAN AND RESULTS OF PRESENT EXPERIMENT

Assuming that there are problems in connection with the use of films for teaching purposes and that the film will not play its proper role in the classroom until concrete evidence of its value has been established, the writer undertook to experiment with the use of films for instructional purposes. The problem involved the question of determining the most advantageous time to present a film when it is used as a teaching device in connection with reading.

In an attempt to find a solution to the question and to develop a possible technique for utilizing motion pictures, a series of film presentations was devised in Grade VI of the Laboratory School of the State Teachers College at Slippery Rock, Pennsylvania. Over a period of two years (1937-38 and 1938-39) the experiment involved the use of seventy-five children. In the first year the tests were given; then a second series was used to verify the first. During the second year the same procedure was used again, and a verification experiment was conducted.

The materials integrated for this procedure pertained to reading and nature study. These materials were chosen because excellent noncommercial films are available in the field of nature. These films portray the life, the habitats, the distinguishing characteristics, and the value of the animals of the various families. The reading material included mimeographed stories adapted from *Compton's Pictured Encyclopedia*, *Nature Magazine*, *National Geographic Magazine*, and children's supplementary readers.

The objectives of the entire unit were broad and comprehensive: (1) to present to the children some of the living creatures of the world; (2) to give the children opportunity to understand the natural habitats, the characteristics of work, and the family resemblances of each type of creature; and (3) to create within the children an understanding of the usefulness and value of each creature. The units of work in this study included the families of the monkeys and apes, the bears, the game birds, and the ruffed grouse.

In the subtopics of this unit on the living creatures of the world, the time of presenting the film varied. Thus the film was presented first in one subtopic, second in another, etc. For the purpose of determining the best time for the presentation of the film, it was necessary to give a test during the period devoted to each particular

family. Every period, therefore, was subdivided into four parts: discussion, reading, film, test. These periods of activity were rotated in such a manner that the film came at different times in the period. The test, however, remained in a constant location; it was always last. The divisions of the periods were rotated in the following manner: (1) discussion, film, reading, test; (2) discussion, reading, film, test; and (3) film, reading, discussion, test.

The results of showing the film at different times within the period were measured by means of objective tests of the true-false type. The tests were such that they measured the child's understanding of the creature just studied. Since each film should add something over and above what is possible by other mediums of instruction, the tests included questions on the material read, inferences which could be drawn from the reading material, and actual or implied facts from the film. An example of the procedure used in one presentation follows.

In the topic dealing with the family of monkeys and apes, the subject was introduced by means of the circus, the zoo, and the organ-grinder. Each child was urged to visit and to observe a small collection of monkeys which was located near the school. All the children had seen monkeys of some type.

After this discussion the reading material was presented. Then the film was shown to clarify and elucidate the material read. For instance, the children had never seen the words "orangutan," "gorilla," and "chimpanzee." They were not familiar with the dog-faced monkey. They had not visualized monkeys in their natural jungle habitats. After the children had read the printed material, the picture added new vicarious experiences. These children had never seen monkeys which were not confined in cages or attached to organ-grinders. In the test following this topic the questions were asked on both the reading material and the film. This procedure is a sample of the second plan of rotation: discussion, reading, film, test. Each of the other topics was handled in a like manner. The variation occurred in the rotation process.

Each of the rotation procedures was used twice: first, to obtain results; second, to verify the results obtained. In the majority of cases there was little change in the scores obtained on the tests.

A tabulation was kept of each child's scores on the tests following the three rotations. Comparison of the three scores of each child then revealed which method was superior, or which methods were equally effective, in his case. From all the tabulations for all pupils were determined the total number and the percentage of the comparisons showing the effectiveness of each method. The percentages obtained in this manner are shown in Table 1.

TABLE 1
EFFECTIVENESS OF THREE METHODS OF FILM PRESENTATION
AS SHOWN BY TEST RESULTS

	Percentage of Comparisons
Superiority shown for:	
Discussion, reading, film, test	43
Film, reading, discussion, test	21
Discussion, film, reading, test	11
Equality shown for:	
Film, reading, discussion, test <i>and</i> discussion, reading, film, test	14
Discussion, film, reading, test <i>and</i> film, reading, discussion, test	4
Discussion, film, reading, test <i>and</i> discussion, reading, film, test	3
All methods	4

The second or verification tests yielded the following results: (1) Presenting the film before the reading but after the discussion was as effective as presenting it after the reading and discussion in only 3 per cent of the cases. (2) In 4 per cent of the cases the location of the discussion made no difference in the test results provided that the film preceded the reading. (3) Four per cent of the scores indicated that the location of the various activities within the period was immaterial; that is, there was no significant difference in the test results regardless of the method of rotation. (4) Eleven per cent of the scores indicated that the discussion, film, reading, test rotation was superior to any other. (5) Fourteen per cent of the scores indicated that the discussion, reading, film, test combination was equal to the film, reading, discussion, test procedure. (6) Twenty-one per cent of the scores indicated the superiority of the method

of film, reading, discussion, test. (7) Forty-three per cent of the scores indicated the superiority of the discussion, reading, film, test procedure. This procedure also had the highest median score.

The general conclusions to be reached from this study are (1) that the showing of the film after the material has been read is superior to the utilization of the film for motivating purposes and (2) that use of the film after reading clarifies the printed matter better than the printed matter elucidates the film.

It must be stated, however, that these conclusions are valid for only one type of material and for one age level. Further experimentation will be necessary before definite conclusions can be reached. The writer proposes to continue this type of investigation with other subjects and other integrations in order to determine the value of the motion picture within the classroom as an additional device for furthering the educational process.

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SOME PRINCIPLES OF SUPERVISION FOR SMALL VILLAGE SCHOOLS

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STUDENTS concerned with the preparation of teachers have complained that large school systems often fail to do their part in training young teachers in service during the formative years just after graduation. Because of the requirement of two or more years of experience before one may teach in some of the large schools, most inexperienced teachers begin their careers in small villages, where they have almost no supervision and are left largely to their own devices. *After some service in small schools a few of them may be employed in larger cities which have the advantages of supervision.* In village schools with from six to fifteen teachers, no supervisors are employed, and there is little oversight of the teaching by the principal and the superintendent. Since approximately 49 per cent of the pupils in the United States attend schools in communities with populations of less than twenty-five hundred,¹ the problem of providing for the reasonable supervision of instruction in small schools is important.

Supervision needs redefinition if it is to be applied reasonably to these small schools. This redefinition may be accomplished by answering the following queries in a way that may suggest a pattern of organization and procedures for putting the theory of instructional improvement into practice. (1) What officers of instruction in small village schools have supervisory functions? (2) What supervisory functions ought to be performed in small village schools and who should perform them? (3) How should the personnel of small village schools be organized to accomplish the functions of supervision suggested?

¹ *Biennial Survey of Education in the United States: 1934-36*, Vol. I, chap. v, p. 7. United States Office of Education Bulletin No. 2, 1937 (advance pages)

OFFICERS WITH SUPERVISORY FUNCTIONS

An answer to the first query arises from the philosophy that has grown up in connection with the development of supervision in small schools. All supervision should be pointed toward the individual pupil rather than toward the teacher. The pupil is being instructed, not the teacher. Hence all the facilities, such as buildings, playgrounds, equipment, and supplies, and all the money spent for these facilities have only one purpose: the best possible instruction of the pupils with full recognition of their needs as individuals.

Some general illustrations will further emphasize this principle. The organization of a school into a junior and a senior high school or a six-year high school following six years of elementary school, if it is done to serve administrative convenience, must be justified as a means of improving the efficiency of instruction and the worthwhileness of the educational opportunities offered to pupils. The provision of space for play, the erection and the maintenance of a proper school building, the equipment used in the building, and the janitorial facilities and supplies are justifiable only by their effect in carrying out the recognized educational objectives.

Similar justification should be made of the internal organization: the administration of class groups, schedules, and courses of study; the elective system; the amount and distribution of the study time of the pupils; and the size, capacity, seating arrangement, ventilation, lighting, and heating of classrooms, dressing-rooms, auditorium, and gymnasium. All such internal details of management should contribute to the health, the command of the fundamental processes, worthy home membership, worthy use of leisure time, guidance toward a vocation, good citizenship, ethical character, and greater consumer efficiency of each pupil and of all pupils collectively. The agencies whose services extend beyond the classroom should contribute to the better performance of such functions as transportation of pupils, medical care, guidance, health protection, the development of citizenship and desirable community relations, character formation, and exploration of each child. The problems arising in connection with all the services mentioned are correctly thought to have a place in supervision because they influence greatly the efficiency of instruction. Thousands of small schools with fewer

than fifteen teachers are trying to provide the services mentioned although they have no officers except the superintendent, teachers, and janitors to perform them. They may provide land for play without a playground supervisor. Their internal organization usually is administered by the teachers and the janitor. A physician may spend a few hours each year in examining the pupils. There are no guidance or attendance officers. There is no psychologist. The teachers conduct their classroom activities largely according to their own judgments based on experience. Pupils may be transported to school by the parents, or the children may transport themselves without oversight.

It should be clear that in such a situation the teachers themselves are the most important supervisory officers. Their opportunities to become well acquainted with the needs of the pupils place them in a strategic position for guidance. Since the teacher designated as principal in the small school is a full-time or almost a full-time teaching officer, he should be ranked as a teacher. The janitor should feel the responsibility for certain supervisory functions in connection with the use of buildings, play areas, and the practice of good house-keeping by the pupils. He should be capable of providing proper heat, light, air movement, and humidity in the classrooms, study halls, gymnasium, and auditorium. The superintendent, because he lacks sufficient clerical assistance, often may have little time beyond his administrative duties to devote wholeheartedly and uninterruptedly to the work of improving instruction. Thus his chief supervisory function may be the leadership and the inspiration of the teachers and the co-ordination of their creative efforts. Hence acceptance of the principle that all efforts to improve instruction should be focused on the pupil makes it possible to challenge the teacher with the greatest responsibility toward supervision in small schools. That principle is an invaluable contribution of the development of supervision in all schools, small or large.

SUPERVISORY FUNCTIONS TO BE PERFORMED

Some of the specific supervisory functions which ought to be performed in small village schools and the officers who should perform them have been suggested, in a general way, in a preceding para-

graph. The teachers should explore the abilities and the talents of the pupils and their sympathies, ideals, attitudes, and interests. Such knowledge is a necessary basis for the provision of proper remedial units with materials and activities to correct defects and to fill gaps found in the learning. Although correcting defects and filling gaps in the learning may be regarded as teaching duties in some circumstances, the theory of supervision in small schools places on the child himself the responsibility for learning through development of self-reliance and self-teaching and through the use of self-administering learning exercises as much as possible. Hence the teacher has the attitude of a guidance officer who is a stimulator and a motivator of learning rather than the attitude that learning depends on his predigestion and skilful presentation of the materials to be taught. The former is essentially an attitude of supervision rather than of teaching.

Other specific activities performed by the teacher as a supervisor are: (1) constructing new units of materials and activities and applying them to the individual needs that have been discovered, (2) providing every pupil with his own best individual curriculum, (3) analyzing the courses of study which he is required to follow, (4) receiving from other courses contributions which may be appropriate to the instruction to be given, (5) testing the results of the learning process of individual pupils as it progresses to the point of mastery in learning, (6) suggesting pretests to the pupils in order that they may discover what they already know at the beginning of each unit of learning, (7) giving diagnostic tests to discover gaps in the learning of any unit before it is completed, (8) testing achievement at intervals to discover progress with respect to the national norms, and (9) evaluating the material in all tests that are to be used. Many other supervisory duties may also be mentioned. In case such responsibilities require additional training, the teacher has the summer available in which to secure it. When teachers accept the principles of supervision stated, they will be eager to train themselves to meet the added responsibilities.

Many additional duties of a supervisory nature may be co-operatively performed by teachers. Teachers in the same building may offer criticisms that will be friendly, mutually helpful, constructive,

and inspiring to one another. They may observe one another's classroom work by means of a time analysis, recording each activity that occurs in a class period and the time of completing it. They may set up classroom standards like those suggested by McMurry¹ and check the objective evidence in one another's class periods that indicates the presence of such qualities as good motivation of pupils; the pupils' attention to relative values, organization of materials, display of initiative; the teacher's ease of control of the classroom; and attention to the individual differences of the pupils.

Teachers may judge their own work by means of check lists for self-analysis. They may observe, by the use of check lists, the features of the recitation, the classroom environment, or the quality of the questions and replies of teacher and pupils. The use of seating charts to relate the evidence to particular pupils is helpful.

Other supervisory activities which may sometimes be performed by teachers in small schools are giving talks at meetings of the parent-teachers' association, making visits to the homes of pupils, and discussing the good qualities and further needs of the schools with the patrons so that adequate financial support will be continuously forthcoming. The research of the teacher in the classroom is important. This activity may be most fully justified if it consists in informal trial in the teacher's own classroom of the results obtained in experimental schools. Such research is necessary for the improvement of school practice. There are experimental schools in which the average intelligence quotient is 120. It is not probable that the results obtained in such situations are equally applicable to schools in which the average intelligence quotient is closer to 100. Finally, the teachers should evaluate continually the instruction given to the pupils.

ORGANIZATION OF PERSONNEL FOR SUPERVISION

The best organization of the personnel in small village schools for accomplishing reasonable supervision is no doubt a co-operative organization—the only type which seems feasible in a situation consisting of a superintendent, several teachers, a teaching principal,

¹ Frank M. McMurry, *Elementary School Standards*, pp 5-12 Yonkers-on-Hudson, New York: World Book Co., 1914

and a janitor. The teachers in a small system may organize themselves informally as supervisors of the instruction of the individual pupils attending their school. The superintendent should be recognized as the directing and inspiring co-ordinator of the activities which the teachers plan to carry out by group agreement. Under such an organization the teachers have abundant opportunity to exercise initiative in suggesting pupil activities that should be emphasized and the evaluations that should be made.

For more than two hundred years before there were any superintendents of schools, the teachers in this country had to perform all these duties if they were performed at all. With the current emphasis on the training and the professional competence of teachers, there is a new opportunity for well-trained members of the profession in the smaller schools to find ways of co-operating with their peers for the performance of many of these necessary duties. If the small school is to be worthy of the responsibility placed on it with respect to the training of teachers for service in larger communities and if it is to justify its existence as an efficient school, the duties suggested should be performed. Since there are no persons except the teachers, the teaching principal, the janitor, and the superintendent to perform them, these officers should assume the duties mentioned. Hence the possibility of adapting certain principles of good supervision to the smaller schools becomes a challenge to the best efforts of those who teach in these schools.

SELECTED REFERENCES ON TEACHER EDUCATION¹

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THE references included in this bibliography were published between July 1, 1938, and June 30, 1939. These publications discuss significant issues relating to the education of teachers in elementary and secondary schools and in higher institutions. Three criteria were used in selecting from the much larger number of references published those included in this list: (1) objective analyses and statistical accounts of important aspects of teacher education; (2) comprehensive reports in the form of bulletins, yearbooks, and reports of proceedings; (3) materials which are reasonably accessible.

580. AMERICAN ASSOCIATION OF TEACHERS COLLEGES. *Eighteenth Yearbook, 1939*. Oneonta, New York: Charles W. Hunt, Secretary (% State Normal School), 1939. Pp. 164.

Includes a series of reports on the following major topics: the place of general education in the program of teacher preparation, the responsibility of institutions for preparing teachers for general professional and community responsibilities, improving teacher personnel, and "next steps" in teacher education.

581. ANDERSON, PAUL L. "Relation of Theory and Practice in the Preparation of Teachers in Teachers Colleges," *Educational Administration and Supervision*, XXIV (December, 1938), 641-58.

Summarizes studies showing evidence of failure to effect co-operation between practice work and theory and reviews reports on attempts being made to secure needed co-operation.

682. ASHBAUGH, E. J. "Standards for Teacher-training Institutions," *School and Society*, XLIX (June 17, 1939), 749-55.

Sketches briefly the history of teacher-training institutions from the point of view of the standards that are evolving and presents a list of twelve standards of excellence.

¹ See also Items 452 and 453 (Monroe and Marks) and 470 (Davis) in the list of selected references appearing in the September, 1939, number of the *Elementary School Journal*, and Items 571 (Siedle), 572, and 574 (Woellner) in the November, 1939, number of the *School Review*.

683. BAGLEY, WILLIAM C. "What Should Be the Equipment in the Natural Sciences of Teachers in Other Fields," *Educational Administration and Supervision*, XXIV (November, 1938), 561-69.

Points out that, at a time when an understanding of science is becoming increasingly important, many persons entering teachers' colleges probably do not have adequate science backgrounds.

684. BAILEY, FRANCIS L. *A Planned Supply of Teachers for Vermont*. Teachers College Contributions to Education, No. 771. New York: Teachers College, Columbia University, 1939. Pp. vi+88.

Reports the results of a study of ways and means of planning and controlling supply and demand so that the supply of teachers for each type of position may, as nearly as possible, balance the demand.

685. BARUCH, DOROTHY W. "Preparation of Teachers for Early Childhood Education," *California Journal of Elementary Education*, VII (November, 1938), 114-18.

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686. BAXTER, EDWARD J. "The Teaching Ph.D. Again," *Educational Record*, XX (January, 1939), 107-17.

Presents findings of a survey of forty-four graduate schools, the purpose of which was to determine the extent to which doctoral candidates are being given specific training to fit them for teaching positions in colleges.

687. BIGELOW, KARL W. "The Education of Teachers in a Democracy," *Educational Record*, XIX (July, 1938), 292-303.

Points out principles believed to be "the essentials of teacher education in a democracy." These involve emphasis on knowledge of the "nature of a democratic social organization."

688. BIGELOW, KARL W. "Educating Teachers for Change," *Educational Record*, Supplement No. 12, XX (January, 1939), 32-43.

Points out that a rapidly changing social and cultural milieu means that teacher education must be directed toward producing teachers sufficiently flexible to be able to adjust to constantly changing demands.

689. BOARDMAN, CHARLES W. "Qualifying Examinations as a Technique for Selecting Students in Education (Abstract)," *Research on the Foundations of American Education*, pp. 102-6. Official Report of the American Educational Research Association, 1939. Washington: American Educational Research Association, 1939.

Reviews the evidence accumulated during a period of five years relative to the validity of the qualifying examination as a technique for selecting prospective teachers.

690. BREWINGTON, ANN, and BERG, EVELYN. "Commercial Teacher Training—A Bibliography," *Bibliographies and Directory of Members*, pp. 3-39. National Association of Commercial Teacher-training Institutions, Bulletin No. 15. Muncie, Indiana. Vernal H. Carmichael, Secretary (% Ball State Teachers College), 1938.

Presents significant references concerning "the history, relationships and trends of commercial teacher training," "research in process in commercial education," and publications of the National Association of Commercial Teacher-training Institutions.

691. BREWINGTON, ANN, and BERG, EVELYN. *State Certification of Teachers of Business Education*. National Association of Commercial Teacher-training Institutions, Bulletin No. 16. Muncie, Indiana; Vernal H. Carmichael, Secretary (% Ball State Teachers College), 1939. Pp. 32.

Presents data concerning state requirements for certification of teachers of business education and concerning the relations existing between certification and such factors as teaching and business experience, in-service training, professional growth, and standards of ability or performance.

692. DODGE, HOMER L. "The Training of College and University Teachers," *School and Society*, XLIX (April 22, 1939), 493-99.

Reports the results of a study to determine what provisions are being made by colleges and universities to insure that prospective college teachers are receiving adequate professional preparation.

693. DODNA, QUINCY. "The Selection of Candidates for Admission to Teacher-Education Institutions," *Educational Administration and Supervision*, XXV (April, 1939), 301-5.

Discusses problems involved in attempting to work out methods of selection for admission to teacher-training institutions.

694. DOWNS, MARTHA. "Significant Trends in Teachers College Personnel Practices," *Educational Administration and Supervision*, XXIV (November, 1938), 615-24.

Reviews recent promising trends in personnel practices in teachers' colleges.

695. ELIASSEN, R. H., and ANDERSON, EARL W. "Investigations of Teacher Supply and Demand Reported in 1938," *Educational Research Bulletin*, XVIII (April 5, 1939), 99-102, 116.

Summarizes data on placement of graduates from teacher-training institutions as reported in a number of studies.

696. EMBREE, EDWIN R. "The Education of Teachers," *Review for the Two-Year Period, 1936-1938*, pp. 6-19. Chicago: Julius Rosenwald Fund, 1938.

Emphasizes the importance of the education of teachers, points out lack of financial support of institutions and departments that prepare teachers, con-

siders the essentials of a good teachers' college, and identifies special problems relating to the preparation of rural teachers.

697. EVERETT, SAMUEL (Chairman). "Professional Preparation of High School Teachers: A Committee Report," *North Central Association Quarterly*, XIII (January, 1939), 297-300.

Reports progress of the Committee on Professional Preparation of High School Teachers, a committee of the North Central Association, and includes brief descriptions of a number of studies being made under authorization by this committee.

698. FRISTOE, DEWEY. "Co-ordination of Laboratory-School Practice and Educational Theory in the Teachers College," *Educational Administration and Supervision*, XXV (April, 1939), 267-86.

Summarizes studies relating to the gulf between educational theory and the application of the theory in the training school. Suggests principles and procedures for rendering more effective the work of education departments and training schools.

699. GAY, STEWART IRWIN. "Training of Latin Teachers Given in Colleges and Universities in the United States," *Educational Administration and Supervision*, XXIV (October, 1938), 351-56.

Reports data from eighty-six institutions concerning amount and kind of professional training given to prospective Latin teachers.

700. GRAY, WILLIAM S. (Editor). *The Preparation and In-service Training of College Teachers*. Proceedings of the Institute for Administrative Officers of Higher Institutions, Vol. X. Chicago: University of Chicago Press, 1938. Pp. viii+230.

Includes a series of critical papers concerning current college curriculums and the types of preparation now provided for prospective college teachers.

701. GREENE, J. E., and STATON, THOMAS F. "Predictive Value of Various Tests of Emotionality and Adjustment in a Guidance Program for Prospective Teachers," *Journal of Educational Research*, XXXII (May, 1939), 653-59.

Presents data on relative predictive value of twelve tests of emotionality and adjustment, three tests of teaching aptitude, and four supplementary measurements in a guidance program applied to one hundred education students.

702. GRIEDER, CALVIN. "Speech Training for Prospective Teachers," *Educational Administration and Supervision*, XXIV (September, 1938), 469-76.

Presents data concerning the number of speech teachers in high schools of Iowa, discusses the importance of good speech for teachers, summarizes the results of studies of speech qualities of prospective teachers, and submits recommendations for teacher-education institutions.

703. HAGGERTY, HELEN RUTH. *Certain Factors in the Professional Education of Women Teachers of Physical Education*. Teachers College Contributions

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Summarizes findings of a study of how variations in knowledge of professional subject matter possessed by Senior women majoring in physical education in forty-six colleges, universities, and teachers' colleges are related to characteristics of the students, staff members, and institutions.

- 704 HARPER, CHARLES A. *A Century of Public Teacher Education*. Washington. Hugh Birch-Horace Mann Fund for the American Association of Teachers Colleges, 1939. Pp. 176

Considers major developments under the following headings. "Beginnings in Massachusetts," "The Eastern Normal Schools, 1839-1860," "The Western Normal Schools, 1850-1875," "Nature and Contributions of the Normal Schools, 1860-1900," "Transition to the State Teachers College, 1900-1926," and "The Twentieth-Century Teachers College."

- 705 HOLLINGWORTH, LETA S. "What We Know about the Early Selection and Training of Leaders," *Teachers College Record*, XL (April, 1939), 575-92.

Assumes that the real leader should be a "true knower." Makes pertinent suggestions under the following headings: selection, intellectual education, emotional education, matters of general policy.

706. *Institutions of Higher Learning in Relation to a State Program of Teacher Education*. Bulletin 156. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 30.

Presents information on types of higher institutions. history, aims, purposes, policies, and interrelationships.

- 707 JACKSON, RED E. "Rise of Teacher-training for Negroes," *Journal of Negro Education*, VII (October, 1938), 540-47.

Traces the history of provisions for teacher training of Negroes.

708. JEWETT, IDA A., and HAYS, EDNA. "An Examination of Recent Literature on the Education of Teachers," *Teachers College Record*, XL (November, 1938), 129-49.

Reviews recent literature to determine principles relating to the improvement of teacher preparation. Includes an annotated bibliography of 104 items.

- 709 JOHNSON, B LAMAR. "Needed. A Doctor's Degree for General Education," *Journal of Higher Education*, X (February, 1939), 75-78.

Advocates a Doctor's degree in the field of "general education" to make possible a supply of teachers fitted for colleges stressing general education at the undergraduate level.

- 710 JUDD, CHARLES H. *Preparation of School Personnel*. The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xii+152

Presents major recommendations and conclusions growing out of a survey of teacher education and personnel as part of the Regents' Inquiry.

711. *The Laboratory School of the Indiana State Teachers College, Elementary Grades.* Teachers College Journal, Vol X, No. 3. Terre Haute, Indiana: Indiana State Teachers College, 1939
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712. LAFFERTY, H. M. "Determining Objectives in Teacher-Education," *Educational Administration and Supervision*, XXV (January, 1939), 1-17.
Discusses factors to be taken into consideration in setting up objectives for teacher education.
713. MAXWELL, P. A. "The Teaching of Education in Four Mid-western States," *Educational Administration and Supervision*, XXV (February, 1939), 98-106.
Presents data on the organization of 204 courses taught by 57 teachers of education.
714. NELSON, ESTHER MARION. *An Analysis of Content of Student-teaching Courses for Education of Elementary Teachers in State Teachers Colleges.* Teachers College Contributions to Education, No. 723 New York: Teachers College, Columbia University, 1939 Pp. viii+332.
Analyzes student-teaching courses for elementary teachers offered in fifty-seven teacher-preparing institutions and offers suggestions and recommendations for enrichment of the program.
715. PAINTER, WILLIAM I "Teacher Training in English Literature," *School and Society*, XLVIII (October 29, 1938), 568-72.
Reports the results of a study among twelve large universities and teachers' colleges to determine the extent of the reading by prospective teachers "of literature recommended for adolescents and the effect of additional study of English in college on the scope of such reading."
716. PECHSTEIN, L. A. "Differentiating the Training of Teachers," *School and Society*, XLVIII (October 1, 1938), 417-22.
Summarizes the results of fifteen years of experimentation in a co-operative teacher-education program and describes the major characteristics of the differentiated program recently adopted by Teachers College, University of Cincinnati.
717. PIERCE, PAUL R. "Can Teachers Be Trained for New Curriculums?" *School Review*, XLVII (March, 1939), 173-81.
Presents an "analysis of training needs revealed through field experience with new curriculums" and attempts to "indicate types of professional training by which such needs can be most effectively solved."
718. PITTINGER, B. F. "Teacher Education and Training," *Educational Record*, XIX (October, 1938), 463-76.

Undertakes constructive criticism of present trends and emphases in the education of teachers, with particular reference to the relative importance of subject-matter and professional courses

719. PITTINGER, B. F. "The General College in Teacher Education," *Educational Forum*, III (November, 1938), 5-12

Raises the question of "the present and future place of the general college in a nation-wide program for the education of teachers," emphasizing the fact that teachers' colleges are enlarging their scope and objectives.

720. POTTHOFF, EDWARD F. *Simplifying the Combinations of Subjects Assigned to High School Teachers*. University of Illinois Bulletin, Vol XXXVI, No. 87. Urbana, Illinois: University of Illinois, 1939. Pp. 66.

Describes a simplified system of teaching combinations and shows how they may be applied in each of one hundred high schools.

721. REUSSER, WALTER C. "A Program of Personnel Work for Students in Teacher Training at the University of Wyoming," *Educational Administration and Supervision*, XXV (May, 1939), 388-98.

Discusses the program adopted by the Committee on Student Personnel, including methods of interesting superior high-school graduates in teaching, the advisory plan, the testing program, and the cumulative record.

722. REYNOLDS, CHARLES WILLIAM. *The Development of Generalized Science Courses in State Teachers Colleges*. Abstract of Contribution to Education No. 210. Nashville, Tennessee: George Peabody College for Teachers, 1938. Pp. 8.

Summarizes the development and the present status of generalized science courses as revealed by questionnaires sent to state teachers' colleges and by analyses of textbooks, syllabi, and catalogues.

723. REYNOLDS, O. EDGAR, KINDER, JAMES S.; and BAUGHIER, J. I. "Desirable Standards for Student-teaching in Liberal Arts Colleges," *Educational Administration and Supervision*, XXIV (September, 1938), 401-10

Summarizes standards relating to facilities, finances, personnel, selection of students, supervision, and the curriculum, which have been prepared co-operatively by a committee of the Association of Liberal Arts Colleges of Pennsylvania for the Advancement of Teaching

724. ROSENLOF, G. W. "The Professional Training Qualifications of 1001 New and Inexperienced Teachers," *North Central Association Quarterly*, XIII (April, 1939), 498-504.

Presents data on professional preparation of 1,001 new high-school teachers, with special emphasis on range and central tendencies of credit hours in education, number of different courses, frequency of mention of courses listed, and variations in listings from the twenty states represented.

725. SEEDS, CORINNE. "Next Steps in the Preparation of Teachers for Later Childhood Education," *California Journal of Elementary Education*, VII (November, 1938), 119-28.
Outlines abilities and skills needed by a teacher of integrated courses and suggests ways in which teacher education may help to prepare students for "new" methods of teaching
726. "Selective Admission of Prospective Teachers." Research Studies in Selective Admission and Placement, No. 1. Detroit, Michigan: College of Education, Wayne University, 1939. Pp. 157 (mimeographed).
Describes the selective admission process at Wayne University; presents copies of the forms, tests, and reference reports used; and summarizes data relating to the operation of the plan during a two-year period.
727. SMITH, C. CURRIEN. "Specialization and the Education of Teachers," *Educational Administration and Supervision*, XXIV (November, 1938), 593-608.
Deplores the growing trend toward specialization in the education of secondary-school teachers when the curriculum of the secondary school itself is moving in the direction of general education
728. SMITH, PAYSON. "A Century of Teacher Education," *Journal of the National Education Association*, XXVIII (May, 1939), 133-38.
Sketches the history of the founding of the first state normal school in the country and points out some general contributions of the normal school to democracy and the spread of knowledge.
729. *Standards for the Education and Certification of Administrative and Supervisory Officers*. Bulletin No. 158. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 16.
Summarizes qualifications for supervisory and administrative officers in the public-school systems of Pennsylvania and "sets forth the procedure for obtaining commissions and certificates to serve in these capacities."
730. STREBEL, RALPH F. "Student-teaching in a Unified Program of Teacher Education," *Educational Administration and Supervision*, XXV (April, 1939), 295-300.
Describes a new plan of student teaching in use at Syracuse University, which is designed to afford a more thorough understanding and effective application of theory
731. SUPERVISORS OF STUDENT TEACHING. *Nineteenth Annual Session, Cleveland, Ohio, February 27 and 28, 1939*. Athens, Ohio: Edith E. Beechel, President (% Ohio University), 1939. Pp. 114.
Includes reports on the following topics: "Controversial Issues in and Tentative Proposals for Programs in Student Teaching," "Possible Approaches to Certain Problems in the Supervision of Student Teaching," "Redirecting Teacher Education and Its Implication for Supervisors of Student Teaching," and "Redefining the Values and Functions of Student Teaching."

732. TANSIL, REBECCA CATHERINE. *The Contributions of Cumulative Personnel Records to a Teacher-Education Program*. Teachers College Contributions to Education, No. 764. New York: Teachers College, Columbia University, 1939. Pp. viii+158.
Presents data on extent to which cumulative personnel records used in a teachers' college aid in student development.
733. *Teacher Education Curriculums*. Bulletin 153. Harrisburg, Pennsylvania: State Department of Public Instruction, 1938. Pp. 54.
Presents a "compilation of the teacher-education curriculums now available in the Pennsylvania State Teachers Colleges."
734. *Teacher Placement*. Bulletin 152. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 32
Describes a state program of teacher placement, including its underlying philosophy and details of actual operation, and presents data on the placement as of October, 1938, of graduates of state teachers' colleges in Pennsylvania.
735. THORNDIKE, EDWARD L. "How May We Improve the Selection, Training, and Life-Work of Leaders?" *Teachers College Record*, XL (April, 1939), 593-605.
Presents significant facts about actual life-work, training for it, and selection. Uses information from various fields in addition to teaching.
736. VALENTINE, ALAN "Teacher Training versus Teacher Education," *Educational Record*, XIX (July, 1938), 332-45
Criticizes teacher-training institutions for turning out "trained" but not "educated" school personnel; objects to emphasis on practice teaching and on rigid state certification requirements.
737. VAN DEN BERG, LAWRENCE H. (Compiler and Editor) *Problems in Teacher-training*. Proceedings of the 1938 Spring Conference of the Eastern States Association of Professional Schools for Teachers, Vol. XIII. Newburgh, New York: Moore Printing Co., Inc., 1938. Pp. xvii+416.
Includes a series of reports dealing with problems in teacher preparation at various levels and in a number of fields.
738. WALLIN, J. E. WALLACE "What Teachers Think about the Value of Mental Hygiene Courses," *Educational Administration and Supervision*, XXIV (December, 1938), 675-86.
Presents data on personal and professional values of a course on personality maladjustments and mental hygiene as judged by eighty-five students.
739. WATSON, GOODWIN, COTTRELL, DONALD P.; and LLOYD-JONES, ESTHER M. *Redirecting Teacher Education*. New York: Teachers College, Columbia University, 1938. Pp. x+106.
Presents conclusions concerning present teacher-education programs and makes suggestions and recommendations for improvements, particularly along the lines of selection, guidance, standards, breadth of experience, etc.

740. WELDIN, WINIFRED. "Setting a New Pace in the Education of Student Teachers," *Elementary School Journal*, XXXIX (September, 1938), 54-59.
Describes the objectives and the content of a nine weeks' practicum during the Junior year at the State Teachers College, Trenton, New Jersey, which prepares for student teaching in the Senior year.
741. WOLTERS, A. W. "The Place of Psychology in the Training of Teachers," *New Era in Home and School*, XIX (July-August, 1938), 205-8.
Points out that an understanding of psychology is essential to a teacher but that an improperly constructed course in psychology may be useless or even dangerous.
742. *A Working Philosophy in the Field of Teacher Education* Bulletin 157. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 20.
Presents "fundamental principles on which teacher-education programs must be developed" through briefly stated "trenchant observations."
743. WREN, F. L. "The Professional Preparation of Mathematics Teachers," *Mathematics Teacher*, XXXII (March, 1939), 99-105.
Presents "five proposals for positive concerted action designed to define the teaching of mathematics as a true profession and to outline a functional program for the professional preparation of teachers of mathematics."

Educational Writings



REVIEWS AND BOOK NOTES

NEW PRINCIPLES OF CURRICULUM CONSTRUCTION—It is a pleasure to find a progressive educator who is aware of the existence of the problem of the curriculum and who is willing to attack the question of *what* to teach as vigorously as he attacks that of *how* to teach. Melvin¹ says:

The question, "teach what?" has been briefly answered by the most debonair of the new school people by the statement that in the modern school there is no curriculum. Probably there is no world, no society, nothing to learn—or how can there possibly be no curriculum? . . . The activity curriculum may become just a much-ado-about-nothing curriculum, and the days of children a vapid series of almost goalless activities [pp. 8-9].

Melvin recognizes the need of patient and thorough work in the incorrigible struggle for technique, skill, and mastery. Both knowledge of what to do and knowledge of what to teach are specific.

The present curriculum is an accumulation of minute and unrelated factual material because the principles of curriculum construction are intellectualistic and logical in origin. Logic scatters, whereas life integrates. Through the criteria of life-reference and job analysis, the traditional concepts of the curriculum have been shown to be of little value.

The new principle of curriculum construction proposed is based on action and is developed in terms of goals for which the following are criteria.

- (1) Curriculum goals should be stated in terms of conduct.
- (2) Each goal should represent some act or some complex act involving a series of integrated subacts.
- (3) Each goal should be expressed in the active mood.
- (4) Each goal should be expressed in specific form.
- (5) Each goal should be so stated that the life significance, individual or social, of the desired goal should be obvious to the learner.
- (6) Goals need not all be present or immediate in time.
- (7) Goals should not be set up in nonfunctional, static, general, or merely logical terms [pp. 29-36].

The importance of group as well as individual goals and of more elaborate, significant, and immaterial as well as material goals is recognized.

The traditional classification of knowledge at the basis of our present curriculum-making is sharply criticized because of its Aristotelian logic. Although

¹ A. Gordon Melvin, *Activated Curriculum: A Method and a Model for Class Teachers and Curriculum Committees*. New York: John Day Co., 1939. Pp. x+214. \$2.40.

the curriculum the world over is organized in terms of subjects, Melvin proposes a return to a simple seeing of the world and an organization of knowledge under "the science of energetics." Essentially, the objects of the universe can be classified in terms of their function rather than their status. Thus the earth substances (minerals, soil, metals, etc.) capture energy, express force, change form, and carry force, whereas plant beings transform light and earths, and animal beings transform plant energy and work. The modes of activity of human beings are (1) growing, (2) homemaking, (3) producing, (4) technifying, (5) communicating, (6) socializing, (7) thinking, (8) teaching, (9) energizing, and (10) originating.

Melvin proposes schools for small children (three to six years of age), for children (seven to twelve years old), for youth (thirteen to eighteen years of age), for young men and women, and for adults. At each level the school is to be vertical rather than horizontal in order that children may benefit from contacts with other age levels. For each school he describes a curriculum in some detail, classifying the entire content under each of the ten modes of human activity. For the traditional subject-matter terms, activity goals are substituted. For example, in the lower grades, doing arithmetic does not appear because doing arithmetic is not a life-activity but an abstraction from life. "The goals which involve the materials which are missed occur in another form. *Keeping track of my own money, measuring things, giving and getting correct change* are goals which every individual will want. Thinking about them soon leads to the necessity of setting aside special time for drill in the figuring needed for their successful development" (p. 177). Thus conduct goals ultimately involve subject matter.

Finally, Melvin discusses the reorganization of knowledge and calls for an abandonment of the current, and the development of a new, terminology and classification in terms of functions and activities. This procedure, in Melvin's opinion, will lead to a new society.

One cannot read this book without feeling that a bold attempt has been made to meet a vital defect in present progressive theory. The book is stimulating, is written in a forceful style, and presents its point of view clearly and succinctly. As with many books that start with sweeping criticisms of existing knowledge and procedures, the high hope set up in the reader by the early chapters is gradually changed to disappointment as he finds one system of classification replaced by another without a clear demonstration of the new classification's value. Despite the author's strenuous criticism of our tendency to pigeonhole experience, he closes with a classification that both pigeonholes and diagrams. By substituting the active mood of a verb for the traditional noun, one does not dodge the logical problems inherent in the meaning of terms.

The author proposes to organize all knowledge in terms of its relation to human beings and criticizes the high subjectivity of the traditional classifications. One wonders, however, if he is not returning to a prescientific type of thought in which man was the ruler of the universe and all was designed for

man's comfort and well-being. If this is not outright subjectivism, one certainly wonders what will be the outcome of telling children that the world revolves about them. The Nazis center their world in a myth of Nordic superiority.

Although Melvin mentions the importance of solitude and stresses thinking (rather than knowing), one may ask what type of children will result from a continuous emphasis on action. One sees great numbers of children and adults moving about, much as electrons, bumping into one another, sliding off, energizing, and acting. Like traveling salesmen, they seem to be constantly on the go, doing this or that. I turn from the book with a feeling that our American culture for a very long time has had a science of energetics and that many of our modern educational difficulties come from too much applied energetics and too little knowledge and contemplation. This is not to deny the stimulating quality of Melvin's attempt to think through the curriculum, nor to deprecate the value of that attempt.

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A CONSERVATIVE INTERPRETATION OF THE SCHOOL.—In too many school communities the teaching and administrative staffs think of parents in terms of votes to be cast for bond issues, tax levies, and board elections or as visitors during Education Week and on other special occasions, such as parent-teacher meetings, commencement, athletic events. This limited outlook on school-community relationships was expressed concretely a score of years ago when books began to appear under the general caption of "School Publicity." Since that time at least two forward steps have been taken in this field of writing (chiefly for the professional worker) by use of such expressions as "public relations" and "social interpretation." Committees of citizens have come to serve in advisory and review capacities in connection with curriculum programs and school surveys. It is entirely in keeping with a democratic, co-operative philosophy of school administration and supervision to place in the hands of citizens materials written for the purposes of educational and social interpretation.

Such is the goal of a book¹ for parents which is concerned with the entire period of formal education through elementary school, high school, college, and university. The organization of chapters is primarily in terms of the school subjects studied at the level of instruction under discussion. The point of view is that of the "fundamentalists" or "essentialists" rather than of the "progressives," namely, "that each generation has the obligation to impose on the next the knowledge and the skill which are demonstrably essential to civilized living" (p. 21). The conclusion concerning intelligence is that of "educational determinism," without mention of the significant work of the Chicago and Iowa

¹ John Louis Horn, *The Education of Your Child*. Stanford University, California. Stanford University Press, 1939. Pp. xvi+208 \$3.00.

groups in the measurement of the effect of environment and training on intelligence. "If it is considered possible that children may at various stages of development become appreciably brighter or duller—really lose or gain in intelligence—advice such as you will find offered later in this book is not reliable" (p. 29).

The style of writing is dogmatic and paternalistic, with many sentences in the imperative mode. It is obviously impossible, within the limits of some two hundred pages, to present anything like a satisfactory treatment of procedures and standards for the various school subjects at the elementary, secondary, and higher levels, although a great deal of sound advice is given. To predict the probable reception of this book is difficult: it may miss the mark by falling somewhere between (1) vividly written books for parents, which contain a wealth of human interest in the form of illustrations and cases, and (2) more technical, documented volumes of interpretation which are read not only by the more intelligent citizens but also by numbers of teachers in service and in training.

CARTER V. GOOD

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AN ATTEMPT TO BRING NEW LIFE INTO EDUCATIONAL MEASUREMENT.—In the revision of his textbook on educational measurement¹ Professor McCall sets for himself a rather large task:

Twenty years ago, I found measurement in danger of becoming, like medicine, the property of a professional élite. I wrote and invented that its mysteries might be banished and it might be made available to all teachers. More and more in late years I have felt that measurement is in danger of becoming an ally of the *status quo*. It has tended to spin endlessly about itself a protective web of statistical intricacy, untroubled by any philosophical spark, and undisturbed by the world's travail. This book has been written not only to preserve the good that is in the *status quo* but also to yank measurement out of its statistical complacency, infuse in it a new spirit, sensitize it to the life that is outside as well as inside textbooks, place it, as in former years, in the van of education [p. vii].

The revision consists of eight "books." Book I consists of a single chapter entitled "A Philosophy of Measurement." This chapter presents seventeen "theses," eleven of which are identical with those of the first edition. Three of the original fourteen have been omitted, and six have been added—five at the beginning and one at the end of the list. In Book II "Criteria for the Selection and Construction of Standard and Teacher-made Tests" are discussed under five heads: validity, reliability and objectivity, norms and scales, scoring, and instructions. A concluding chapter in this section presents an extensive but unannotated list of tests and publishers. Book III gives detailed directions for administering tests, obtaining and interpreting grade and age scores, and

¹ William A. McCall, *Measurement: A revision of How To Measure in Education*. New York: Macmillan Co., 1939. Pp. xvi+536. \$4.00

using these scores in the classification of pupils. The greater part of Book IV is devoted to a discussion of the author's Comprehensive Tests—a test of intelligence, a questionnaire on educational background, a test of achievement, and a questionnaire on school practices. These tests, the author thinks, “form a unit particularly acceptable to progressive schools” (p. 215), and, with a chapter on “Health, Dynamic, Personality, and Materials Tests,” constitute the program of measurement for “progressive schools.” Book V, “Guidance and Evaluation of Teaching by Measurement,” presents various criteria for evaluating education and particularly the curriculum. There follows a discussion of conservative and radical views of education, in which the author takes a position against indoctrination and against the view that processes rather than objectives have validity in and of themselves. The author's School Practices Questionnaire discussed in the previous section is said to provide “the only semi-objective instruments yet devised for the direct measurement of teaching practices” (p. 345). A few pages are devoted to the use of test records in guidance and include a brief reference to vocations. The section is concluded by a discussion of “Tests as Teaching Instruments,” “Diagnostic Measurement,” and evaluation of the efficiency of pupils, teachers, and administrators. School marks and reports are the subject of inquiry in Book VI. Most of the section is devoted to an explanation and discussion of the author's “grade score marking system.” A technique is presented for using test scores to determine classification, sectioning, promotion, and graduation. Reports to parents in terms of grade scores are advocated, but the traditional “unsatisfactory” to “very superior” ratings are retained in an interpretative table printed on the sample report card (p. 445). Book VII, “Presentation of Test Results,” consists of a single chapter on graphic methods. With the exception of a few later references, this chapter is almost identical with the similar chapter of the 1922 edition. Book VIII, “How To Scale Tests and Compute Statistical Measures,” is the statistical section. This short section deals with the reference points and scale units; the construction of T scales and other scales, the construction of scaled scoring instruments; and statistical methods, including correlation, reliability, variability, and averages.

To evaluate a book of such uneven merit is difficult. One is cheered to find an educator of the standing of Professor McCall not only militantly loyal to measurement in the face of the opposition which it has encountered but active also to keep it abreast of current educational thought. The very title, *Measurement*, is reassuring, for some who were once friends of measurement seem to have developed an emotional bias against the word itself. At various points the interpretative comments are distinctly forward looking. After discussing various plans of grouping, for example, the author suggests experimentation “with an ever-emerging, ever-fluid, pupil self-grouping plan” (p. 172), in which the pupils of a whole school would sometimes be working in one large group and at other times in groups of different size and membership according to the activities pursued. The point of the reviewer is not to express approval of this particular

plan but of the challenge to experiment in an apparently profitable direction. The type of achievement test discussed and illustrated in some detail (pp. 246 ff.) should give a much needed impetus to experimentation with the measurement of objectives which are neglected in some of the older tests. Though one may question the particular solution proposed by the author, the general trend of the discussion away from the marking systems in current use is commendable.

On the other hand, the book has serious shortcomings. To start with a fault which the author himself recognizes (p. viii), relatively too much space is given to Professor McCall's own work. Anyone, of course, has a right to publicize his own work, particularly when it has the merit of Professor McCall's, but a book giving much emphasis to the author's studies has obvious limitations as a textbook. It would be difficult to defend the scant attention given to the work of Tyler, Wrightstone, Wood, Thurstone, Lindquist, and the American Council on Education. The International test-scoring machine, hailed by many as a major development in testing, is given seven lines.

Of the various methods of rendering test scores comparable, the author has given greatest prominence to the grade score—a score expressed in terms of school grade. The wisdom of this plan will undoubtedly be seriously questioned by technicians.

The treatment of intelligence leaves much to be desired. For one thing, the distinction between the results of the Binet test and the results of a group test is not made sufficiently clear. The 1937 revision of the Stanford-Binet test seems to have escaped the author entirely. Also, too little is said about the unreliability of test scores, and too much confidence is placed in the group intelligence test as a measure of the possibilities of school achievement.

One of the most serious criticisms of the book is the tendency toward making the use of tests too mechanical. In classification, for example, one obtains a pupil's "grade score for placement" by the use of an algebraic formula. Table 7 is a "Table . . . Showing the Automatic [*sic*] Classification of Pupils into Grades on the Basis of Any G (Grade) Score." This mechanistic attitude toward test results, the reviewer believes, will hinder rather than help the attainment of the clinical point of view which an intelligent treatment of individual differences requires. This fault may be stated in another way by saying that there is a tendency through much of the book to deal with the results of tests in isolation from other pertinent data.

The author has made a serious attempt to present measurement in its proper background, to show it as something to be used in carrying forward the processes of education. This point of view, of course, is sound (but not new). Certainly the test specialist should be educator also. It is a problem, however, which nobody seems to have solved to the satisfaction of his colleagues, to write a textbook combining adequately a discussion of the situation in which a knowledge of individual differences is necessary and a presentation of the technical processes which the student must understand to discover and deal with these

differences. Since a discussion of the use of tests opens the whole field of education, the writer of a book is at a loss to know just what situations should be presented. Space is lacking to discuss fundamentally in a single book many of the issues of education and at the same time to present the technical processes of measurement. In the reviewer's judgment, the problem of integrating measurement with the processes of education in a single textbook is still unsolved.

In spite of these adverse comments, the reviewer believes that this book will find a useful place in the literature of measurement. Although the book does not fully meet the specifications set forth in the none too modest statement of the Preface (quoted above), it has substantial merit and it offers to the teacher of measurement a great deal of useful material. It will be of interest also from the standpoint of revealing the present thinking of a competent and productive leader.

H. T. MANUEL

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TOWARD DEMOCRACY THROUGH EDUCATION.—The growing challenge to democratic ideals appearing in different parts of the world makes many Americans apprehensive regarding the existing degree of democracy in our country and any possible extension of it. In times of social anxiety nations commonly direct attention to their schools, and American education is increasingly emphasizing democratic life and citizenship. One difficulty with much of the emphasis, however, is its failure to embody a comprehensive or a consistent view regarding democratic life or to offer suggestions concrete enough to enable teachers to transfer the theory to typical school situations. A recent book,¹ consistent and concrete, aims to help teachers and pupils orient their educational procedures so as to "strengthen the democratic way of life" in school and community and, through analysis of teaching and learning activities, to help establish "a workable basis for the continuous reorganization of school practice" (p. v).

The sixteen chapters, grouped into three parts, are organized largely around individual and social conflicts. Part I, "The Origin and Nature of Conflicts," begins by contrasting emotional conditioning with social education. The author characterizes areas of conflicting ideas, shows how adults heap conflict upon children, and suggests adult recognition of their own conflicts as important in helping children avoid conflicts. He analyzes the informal school, its conflict with American tradition, and its rooting in economic trends, scientific data, and social ideals. He concludes this section with a discussion of marks, suggesting parallels between mark-getting in school and money-making in business, and urges a reduced emphasis on marks in which "R," indicating readiness for the next grade, might supplant attempts at detailed marking differentiations.

¹ William Bruce, *Principles of Democratic Education: A Functional Approach to Fundamental Problems of Teaching*. New York: Prentice-Hall, Inc., 1939. Pp. xiv+382. \$2 50

In Part II, "Through Conflicts of Psychology to Harmony in Method," the author reviews the confusion in various areas of psychology as related to the child and to learning, shows that in numerous instances confusion arises from inadequate analysis or from lack of consistency in the point of departure of the analysis, and looks to method for promise in bringing order out of confusion. Chapters relate to conflict in the areas of items and units, habit formation, personality and character, heredity, the nature of intelligence, relation of intelligence to habit, and the "self." A chapter then considers the harmonizing, through projects ("making" activities), of practices concerning drill, problem-solving, aesthetic appreciation, and socialization.

Part III is oriented "Toward a Social Outlook," with democracy as its central aim. Multiple parallel objectives in education, with no central aim to which all other objectives are subordinate, is believed to contribute to confusion of outlook. Curriculum revision is urged, in which pupils, parents, teachers, and administrators will participate and in which closer attention will be given to the question of whether examinations hinder or promote educational objectives, and more consideration will be given to such devices as round-table conferences. Scientific experimentation and social democracy are compared, and differences are resolved and similarities elaborated. The relation of coercion and of thinking to social action are explored, emphasis being given to the limited place of the former in democratic procedure. The final chapter urges selected experience as the avenue through which children may arrive at a democratic outlook and emphasizes the need for democratic experience among teachers who would lead children into the democratic way of life.

Each chapter is concluded with an annotated bibliography of from two to five pages. A sixteen-page index and an elaborate table of contents add to the accessibility of the materials in the book.

The author recognizes his heavy indebtedness to Dewey, although in numerous instances Bruce sets forth his concepts in simpler discussion and with more illustration than is typical of his predecessor. Unlike some writers in the field, the author shows many relations between everyday school practice and the concepts and analyses of democracy which he sets forth. This illustration and concreteness make the book valuable for beginning students in education, for thoughtful parents, and for many teachers in service. Perhaps a major value of the book for mature students is its demonstration of how to deal in concrete terms with concepts of democracy and of how to "step them down" for the understanding of youth and lay adults.

HAROLD H. PUNKE

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MAKING DEMOCRACY WORK—At various times in American history both the federal and the state governments have become disturbed over the problems of citizenship. Numerous laws concerning the teaching of the Constitution have been passed, and strenuous efforts have been made to absorb and Americanize

the aliens in our midst. In the field of education these ideas have found expression in the repeated and prolonged efforts to make community civics function. It is interesting to note that the idea of studying one's community was advocated long before sociologists, geographers, and local historians had demonstrated how the study should be made. In spite of the numerous books on community civics, the demonstrable gains from the subject have been exceedingly unsatisfactory. The idea seems to be sound, but few authors have actually succeeded in showing teachers and pupils how to utilize their own community in the process of learning how to live together.

The situation is, however, somewhat encouraging. Earlier in 1939 L. J. O'Rourke published a textbook (*You and Your Community*, Boston: D. C. Heath & Co.) that abounds in concrete instances of pupil participations, and now Whittaker and Jamison¹ come forward with another realistic and practical guide to actual citizenship.

Part I of *Experiences in Citizenship* contains a review of transportation and communication, a section which, in the opinion of this reviewer, is unnecessary for ninth-grade pupils. In most systems the pupils study these topics in nearly every grade of the elementary school, surely there is no need for repeating them in Grade IX. Part II deals with the community and gives an excellent description of numerous normal processes and activities. Part III deals with vocations and other economic problems. Part IV consists of one long chapter on health and safety. Part V deals with the school, the church, and immigration. Part VI is perhaps the most basal, for it comes to grips with the nature, the forms, and the functions of government. Parts VII and VIII deal with taxation, public opinion, propaganda, and good citizenship.

The book is well supplied with graphs, diagrams, charts, and pictures, although some of the pictures are not clear. The suggested projects and activities are numerous and practicable. The style is clear, direct, and sincere. The authors stress the importance of participation and activity. The Preface is an excellent though brief chapter on how to teach successfully. Class visits, scrap-books, and pupil committees are recommended. This textbook is a credit to the authors and publishers and will doubtless meet with the wide use that it deserves.

EDGAR B. WESLEY

University of Minnesota

SOCIAL-UTILITY THEORY OF TEACHING ARITHMETIC.—During the past two years several new books on the teaching of arithmetic have come off the press. The most recent of these books² is largely an exposition of the senior author's philosophy of the arithmetic curriculum. This philosophy has been emphasized

¹ Milo L. Whittaker and Olin G. Jamison, *Experiences in Citizenship*. St. Louis, Missouri: Webster Publishing Co., 1939. Pp. xvi+684. \$1.44.

² Guy M. Wilson, Mildred B. Stone, and Charles O. Dalrymple, *Teaching the New Arithmetic. What To Teach, How To Teach It, Provision for Professional Growth*. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xii+458. \$3.00.

in many of his writings and may be summarized to mean an attainment of 100 per cent accuracy in the fundamentals and a reduction in the offering in computational arithmetic so that the subject will conform to social usage.

The book is divided into four parts. Part I gives a historical survey of the inception of arithmetic in this country and reviews the various theories of teaching arithmetic. Part II gives a comprehensive exposition of methods of teaching the arithmetical processes. Part III is an exhaustive treatment of verbal problems and means of solving them. Part IV is a treatment of miscellaneous topics, such as an appreciation unit, testing in arithmetic, and selection of the textbook.

The authors have stressed the social-utility theory in the teaching of arithmetic: "The basic and dominating aim of arithmetic in the schools is to equip the child with useful skills for business" (p. 7). "The social-utility theory of arithmetic proposes that arithmetic taught in the school shall be the arithmetic that is useful in life" (p. 50). *It is readily seen that a philosophy of this kind views arithmetic as a mere tool subject. Social utility should certainly be one criterion in the selection of material for the arithmetic curriculum, but it cannot be given the prominence that it assumes in this textbook.*

There is a short span from acceptance of the social-utility theory to a fetish for 100 per cent accuracy in the fundamentals. The reviewer would never challenge the demand for 100 per cent accuracy, the means for attaining it is the vital issue. Fundamentally, the authors propose drill and reduction in the amount of the material and the kinds of examples as means of enabling the pupil to attain this desirable goal for computational arithmetic. These are the usual morbid, mechanistic concomitants of the social-utility theory in arithmetic.

The book has several commendable features. In the section which discusses methods, the scientific literature is thoroughly covered, and the material is well documented. The authors have done an excellent job in this respect. At the end of the book there is an exhaustive bibliography of 546 references, grouped according to the following topics: curriculum, methods of teaching, drill, written problems, corrective arithmetic, games and activities, research in arithmetic, and miscellaneous. This bibliography is a real asset to the usefulness of the book. The publisher's editorial department is to be commended for maintaining a uniform pattern in all bibliographical work.

Another commendable part of the book deals with the verbal problem. "The essential characteristic of written problems, or applied arithmetic, is judgment" (p. 281). "The isolated text problem as such should be entirely eliminated from the schoolroom" (p. 296). These quotations represent the basic philosophy in the treatment of verbal problems. This part of the book is worthy of careful study.

Probably the book's favorable features merit an audience. The arithmetic curriculum will be greatly improved if the authors' suggestions on verbal problems are followed.

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A TEXTBOOK IN HISTORY FOR THE JUNIOR HIGH SCHOOL.—Tradition and the pressure of many interested groups compel the authors of textbooks in United States history to include so much material that it is bewildering to the average school pupil. Why cannot a textbook be written presenting our country's history in simple story and attractive style and leaving much of the detail to the encyclopedias? Such a book would make a greater appeal to the children than does the usual textbook, and it would surely be more teachable.

One of the new junior high school textbooks in United States history^{*} attempts to surmount this difficulty. The Preface of this book quotes Paul Klap- per to the effect that junior high school textbooks are "made too encyclopedic." The authors say that the subordination of the trivial has afforded them opportunity to set forth with definite emphasis the really significant aspects of our national development. They have accomplished much in this respect but, in the opinion of the reviewer, have not gone far enough.

The authors have divided the book into nine large units, some of which make a gratifying break from the traditional chronological treatment. These units are as follows: (1) "Discovery and Exploration of America"; (2) "Early European Settlers in North America"; (3) "From Colonies to Nation"; (4) "Growth and Development of the New Nation"; (5) "The New West and the Older East"; (6) "National Expansion and Its Problems"; (7) "Division and Reunion"; (8) "Chapters in Progress," which consists of the topics, "The New South," "The New North," "Toward the Setting Sun," "The Machine Age," "Growth Brings Its Problems," and "New Tasks Facing Our Government"; (9) "World Problems and National Life," which includes "A Nation among Nations," "America in the World War," "America and World Peace," "Progress in Education," "Citizen and Nation in the World Today," and an epilogue, "Our Land and Our People." The first unit begins with life in Mesopotamia and Egypt and carries the background down to the discovery of America.

As an example of the attempt to include a topic to which time and space should not, perhaps, be given, may be cited the description of the Federal Reserve Bank. The description is so sketchy that the teacher will have much explaining to do. The topic should either be given an explanation of greater length or be omitted. Again, why should a junior high school textbook in American history include the Fascist movement in Italy, the story of the German Nazis, or the Spanish Revolution?

The authors have been frank in their treatment of the historical material. The vocabulary and the style of writing are well suited to pupils of the age for which the book is intended. One interesting feature is that diacritical marks are given in parentheses in connection with difficult words. Another unusual and interesting feature is Appendix C, "Well-known Quotations, Epithets, and Nicknames in the History of the United States." Valuable problems, projects, and

^{*} Jesse H. Ames, Merlin M. Ames, and Thomas S. Staples, *Our Land and Our People: The Progress of the American Nation*. St. Louis, Missouri. Webster Publishing Co., 1939. Pp. xiv+690. \$1.80.

activities are given at the end of each chapter. The bibliographies at the ends of the chapters include books for junior high school children.

This textbook is attractively bound and has excellent maps and many interesting pictures, some of which are in sepia. Its typographical makeup is excellent. This publication is a welcome addition to the junior high school textbooks in United States history.

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standing athletic prowess. The principal agencies dealing with out-of-school youth should assume a similar obligation. Improved means must be found to reach young people not now served by those agencies.

Public recreational programs, both physical and nonphysical, must be greatly expanded. They have been regarded too long as a public service in the luxury class. The contribution they can make to a higher level of physical fitness and to the preservation of morale in times of stress must now receive general recognition.

Adequate medical care for the whole population is a major necessity which is made more urgent by the unfortunate crisis in world-affairs. Facilities must be provided where they are now lacking and increased where they are inadequate. Ways must be found to bring the cost of medical care within the means of the large section of the population that cannot afford to pay the whole cost under the present organization of medical service. Consideration should be given to the best method of distributing the costs of illness and medical care for that large group of normally self-supporting persons who are able to meet the average cost of average illness but who may be individually unable, out of current income or savings, to meet the emergency cost of serious or protracted illness. For the poor the provision of adequate medical care must be accepted as a public obligation, since in the long run the cost of neglect is greater than the cost of prevention or cure and falls upon the community as a whole.

The commission is convinced that any public-health program that will effectively strengthen the nation must have some financial support from the federal government. The inequalities among the states in their financial ability to support social services are so great that the improvements necessary for national security cannot be assured by reliance on only state and local resources. The program should, however, operate mainly through the states and through local agencies that are best able to judge of local needs and locally acceptable methods.

Science now has weapons that can be used to destroy some of the great enemies that have lowered the vitality of men and women in past generations. The nation cannot afford to have these possible advantages confined to the more fortunate. Every illness prevented and every young man or woman set on the road to a healthy, useful life are gains far beyond their cost in dollars. No time could be more appropriate than the present to take every advantage of the opportunities for national improvement which have been made available by advances in medical science.

The other policy recommended by the commission is perhaps of even greater importance. It is grounded on the well-established fact that we are developing an economic and social order in which it is increasingly difficult to employ the productive energy of young people. One-third of the unemployed workers of the nation are

young persons of fifteen to twenty-four years of age. The number of farm boys who reach the age of eighteen each year is more than twice as great as the number of farms that fall vacant. Because of these and other like considerations, the commission recommends that American society adopt the policy of providing work for all young persons who want it and who can profit by it.

One frequently suggested solution for the unemployment of youth is to raise the age of compulsory school attendance.

The commission believes that all young people should be required and enabled to attend full-time schools up to the age of sixteen but that it would be undesirable to compel the attendance above that age of young people who would prefer to go to work. Above the age of sixteen many young people who would benefit from the training of a job would be wasting their time in school.

The commission is impressed with the success of experiments that have been made with combinations of part-time schooling and part-time employment. This device for bridging the years between full-time school and full-time job should be extended as rapidly as practicable. The commission recognizes, however, that the opportunities even for part-time work are limited and that this admirable method of introducing youth into industry cannot solve the general unemployment problem of youth in a short time.

The commission feels obliged to emphasize the fact that, whether in war or at peace, any nation interested in self-preservation must see to it that the young have a proper chance to grow into useful citizens. In past generations this country provided opportunity for young people by acquiring vast areas of vacant land in which they could settle. The obligation to provide opportunity for youth has become imperative today because it is not being met by the conditions of private and public employment as they exist.

No good purpose can be served by blaming the young person who has not found a job for himself. The facts of arithmetic cannot be wished away. In the entire country a few thousand jobs probably are vacant because no competent applicant has appeared. Another few thousand chances probably exist for unusual young people to make their own jobs by starting new enterprises. But there are several million more young men and women who want to work than there are jobs available for them. The totals do not balance. The bright or the lucky get the jobs, but some will have to be left out until their elders, who control the economic conditions of the country, find some way to open the gates.

The fact that the older people own the property and control practically all the jobs lays upon them the major responsibility for making the opportunities match the number of youth they have brought into the world.

In view of the crisis in world-affairs and the necessarily slow adjustment of business to current conditions, the commission concludes that in many states and communities the present gap between the number of jobs for youth and the

number of youth who need and want jobs cannot be closed without the aid of the federal government. Every young person who does not desire to continue in school after sixteen and who cannot get a job in private enterprise should be provided under public auspices with employment in some form of service.

The commission has no desire to minimize the fact that it is frankly advocating a program which will add to the federal budget, and at a time when there is great need for economy and balance of income and expenditures. The actual cost will not, however, be as great as might be thought. The public employment which is provided for young persons need not be full-time nor highly paid. The expenditure per individual young worker need not exceed four hundred dollars per year, from which there will be various deductible assets. The contributions of these young people to the aid of their families will undoubtedly lessen the need for public assistance. The work on which they are placed should be designed to provide constructive work experience in such a manner that the work done is a true service to the community. Work which meets these standards will certainly add to the wealth of the nation.

Public work for young people should be planned with special regard to its educational quality. It should be superintended by persons who are competent to train young people in good work habits as well as in specific skills. It should be carried on in a spirit that will give to the young worker a sense of being valued by, and valuable to, his country. Finally, it should provide an opportunity to try various kinds of work, so that the young person may find his own aptitudes and abilities and may be given some guidance in preparing for private employment in a field where he can be most useful and successful.

In addition to all types of conservation activities and the construction of useful public buildings, one type of work which would be a true service to the community and which should be greatly expanded would consist of producing the goods and services which are needed by the young people themselves and by others who are unemployed and in need. The commission does not regard this as competition with private business, although it may be so considered by some persons. In any event, it is far preferable to unemployment or to the levels of taxation which would be necessary to support a decent level of subsistence for those in need if they are not to be allowed to do anything for themselves.

In the present critical situation it is imperative that none of the human resources of the nation be wasted through haphazard and inefficient methods of vocational selection, preparation, and employment. The provision of adequate vocational guidance, training, and work experience now takes on even more than its ordinarily high importance. Vocational guidance should be based on sound studies of the outlook for employment in the various occupations. On the basis of such studies, every young person should be assisted to determine what work he can do best, should be enabled to obtain the necessary training and experience for that work, and should be aided to get a successful start in it.

Society in each generation has an obligation to provide for youth full oppor-

tunities for vocational exploration, training, and public service. The existence of a world-crisis, by making clear to the nation the need for internal as well as external strength, serves only to emphasize this present obligation. Much time has been lost and too many young people already have a history of frustration and wasted years. There is all the more reason for strengthening this weak point in the national fabric as soon as possible, now that its dangerous nature is evident.

The *Elementary School Journal* recommends to its readers a very serious consideration of these important proposals. The commission, it will be remembered, has in its membership outstanding leaders in most areas of American life.

THE SCHOOLS OF ENGLAND

AMERICAN readers who are interested in a brief but clear account of the English educational system will want to read *Education in England*, a bulletin of the Bureau of School Service of the College of Education, University of Kentucky. The bulletin was prepared by William Septimus Taylor, dean of the College of Education, after a year's study in England. The following paragraphs quoted from the first chapter give a general view of the organization and structure of education in England.

England cannot be said to have an educational system. It would be more accurate to say that it has three systems of education—the council schools, the voluntary schools, and the foundation and private schools. These three "systems" are not clearly defined and they are not wholly distinct one from the other, but they serve as a useful classification to students of English education.

The tax-supported schools in England are called council schools and are under the administration of the Local Education Authority, commonly known as the L.E.A. These schools, which enrol the largest number of pupils, are sometimes called "provided" schools because their buildings are provided by the Local Education Authority. They are supported locally and also from grants from the Board of Education which is the central authority for the administration of education in England and Wales. In 1937 there were enrolled in the council elementary schools in England approximately 3,620,000 children.

The second largest "system" of schools in England is that group known as the voluntary schools. These schools were founded very largely by the Church of England and the Roman Catholic Church. They are sometimes called "non-provided" schools because the buildings are not provided by the Local Education Authority but by the religious body sponsoring the school. The schools provided by voluntary bodies may be "entirely maintained financially by a local

education authority; they may be aided financially by a local education authority; they may receive direct financial aid from the central authority, or they may be entirely self-supporting" (Board of Education, *An Outline of the Structure of the Educational System in England and Wales*, p. 11. Educational Pamphlets, No. 94. London: His Majesty's Stationery Office, 1933). It should be said, however, that relatively few of them are self-supporting and they are becoming dependent for support in larger and larger measure upon the Local Education Authority and upon the Board of Education. In 1937 there were approximately 1,630,000 children enrolled in the voluntary schools of England.

There is another "system" of schools in England that is either private or semi-public in nature. In this group may be found the old foundation schools—Westminster, Harrow, Eton, Winchester, Merchant Taylors', Christ's Hospital, and many others of this type. The better-known schools of this class are usually endowed by charitable trusts, although there are many strong schools that have responsible boards of governors and are not under charitable auspices. There are in addition many excellent schools which are the properties of single individuals or groups of individuals.

The age of compulsory attendance in England begins ordinarily at five years but under certain circumstances may be postponed to six. It continues to the age of fourteen and in a few communities to fifteen. Under the Education Acts of the country it is the duty of the parent during the years of compulsory school attendance "to cause his child to receive efficient elementary instruction in reading, writing, and arithmetic." There is no obligation on the part of the parent to put the child in any particular kind of school. The only obligation that he has is to see to it that during these years the child is enrolled in a school.

Perhaps a clearer picture of the organization and structure of the council schools may be obtained from a description of the child's progress through these schools. The educational program of the typical English child begins at five years of age, when he enters the infant school where he remains for a period of two years. There is provided, however, a program of nursery-school education for some of the children between the ages of two and five years. It is estimated that approximately 4 per cent of all the children in England are fortunate enough to enjoy the advantages of the nursery school. The nursery schools and the infant schools are coeducational, and the children in attendance are taught by women.

At seven years of age the child leaves the infant school and enters the junior school where ordinarily he remains until he is eleven years old. In the junior schools in London and in many of the urban centers in England the boys and girls are separated, the girls going to the girls' junior schools and the boys to the boys' junior schools. As a rule only women teachers are employed in the girls' junior schools and only men teachers in the boys' junior schools. It is not infrequent, however, to find one woman teacher in the boys' junior schools in an attempt to make it a little easier for the boys leaving the infant school to become

adjusted to the junior school teaching staff made up almost wholly of men. In rural England and in many of the smaller towns and even in some of the larger cities, the junior schools are coeducational. Not only are boys and girls enrolled in the same school, but the teaching staff is composed of both men and women.

At the age of ten and a half years all children in England are eligible to take an examination to determine whether or not they may enter the secondary school. If the child passes the examination and if his parents are financially able, he enters the secondary school. His parents obligate themselves to keep him there for a minimum period of five years. However, if he fails to pass the examination for entrance to the secondary school, he continues in elementary education until he is fourteen or fifteen. Under the Reorganization Act of 1926 such a child after leaving the junior school at the age of eleven is supposed to go either into a senior or central school for the three or four years of elementary education. In London at the present time, if he goes into a senior school, he remains for a period of three years and then goes to work. If he goes to a central school, he may stay until fifteen, although when the pressure of work is as heavy as it is at present he will probably drop out of school immediately after his fourteenth birthday, the legal age when he may enter employment. . . .

Although the Reorganization Act was passed in 1926, many counties and many school districts in England have not completed their reorganization programs. The larger cities are attempting to follow the recommendations of the Reorganization Act and are providing senior and central schools for the children from eleven to fourteen years of age who remain in the elementary-school program. The great majority of the counties provide only one post-primary school for children of this age and call it either a senior or a central school. . . .

Approximately 10 per cent of all the children who take the examination at the age of ten and a half are admitted to the secondary schools. Many reasons are given for admitting such a small percentage of the total child population at this age. In the first place, the secondary-school program in England is considerably more expensive than the elementary-school program; in the second place, it is the philosophy of the English people that secondary education should be available only to a small percentage of persons who have the ability to profit most from it; in the third place, these schools offer primarily a college-preparatory curriculum with little emphasis upon preparation for employment; and in the fourth place, England does not have facilities for taking care of a larger proportion of its children in the secondary schools. The English educational system is highly selective. Only the children of best ability are admitted to the secondary school, and only those of best ability in the secondary school are admitted to the universities. At the age of sixteen the secondary-school child is eligible to take an examination for entrance to the university. A relatively small group from the secondary schools take this examination, and of the group who take it fewer than 50 per cent pass.

In London, where the process of selection has been worked out as carefully as

in any other area of England, approximately 10 per cent of the children who take the examination at the age of ten and a half enter the secondary school. Another 10 per cent, or perhaps a somewhat larger proportion, of the children whose standings are just below those admitted to the secondary schools are admitted to the central schools. The remainder, or almost 80 per cent, of the children who take the examination at eleven enter the senior schools.

HERE AND THERE AMONG THE SCHOOLS

IT IS common knowledge that in hundreds of American communities teachers are trying to discover more effective instructional materials and to find better patterns for organizing the activities of children than those in use today. Many of the experiments that the teachers are trying can scarcely be called innovations, but they represent different approaches to the solution of common problems. Items selected for reporting in this issue of the *Elementary School Journal* all relate more or less definitely to procedures designed to improve the instructional program.

Emphases on health and on reading improvement In the Tucson, Arizona, city schools the practice has been adopted of making a definite attempt each year to improve the work in some particular subject or activity. Last year, according to a report that we have received from Jonathan L. Booth, elementary supervisor, the special emphasis was given to health. The plan of organization was that each school act as a unit, with principals, teachers, and pupils working in co-operation with the superintendent, supervisors, nurses, and doctors to solve both the problems of general health of the whole school system and the specific problems peculiar to each school.

During the present year the subject selected for special stress is reading. One reason for the selection of reading is the fact that 59 per cent of the elementary-school pupils in Tucson are from non-Caucasian or non-English-speaking homes. A plan of organization has been worked out through which, it is hoped, all members of the teaching and the supervisory staffs may be stimulated to engage in this co-operative effort to improve the quality of reading instruction throughout the schools of the city. As a basis of the work each teacher is urged to acquaint himself with modern theory and practice con-

cerning the teaching of reading, and a plan of study has been worked out to help teachers accomplish this end.

Some aspects of instruction in Houston, Texas E. E. Oberholtzer, who is superintendent of schools in Houston, Texas, has supplied us with the following statement concerning certain special features of the instructional program of the elementary schools of that city.

Reading and literature.—Throughout the elementary grades this year special emphasis is being given to the development of reading interests and the improvement of reading ability. In most of the larger elementary schools, the library is being made the core of the school. Classes are taken to the library, or library books are brought into the classrooms, so that the children become familiar with the available books. Committees involving large numbers of teachers were appointed by the Houston Teachers Association to assist in compiling lists of desirable books. Through the work of these committees practically all the elementary teachers have become acquainted with the many attractive new books available at the present time for elementary schools. Several hundred of these books were examined to find out where each fitted best into the elementary curriculum.

During the past few years the special emphasis accorded the social studies has brought about a marked growth in interest in informational reading. Therefore, the library work this year is being directed largely toward developing a wider scope of individual interests in recreational reading and a finer discrimination in the selection of books to be read.

Co-operation with the art museum.—For the past three years the directors of the art museum have been co-operating with the school board in providing instruction in art appreciation for all children in the upper grades of the elementary schools, as well as in the junior and senior high schools. A lecturer from the art museum visits every elementary school once each six weeks to give a specially prepared talk directing the attention of the children to the art aspects of the units which they are studying. These lectures are illustrated with slides or with pictures and other materials brought from the museum, and every effort is made to help pupils develop a better appreciation of the place of art, not only in their school work, but also in their everyday activities outside the classroom. For example, when fourth-grade children are studying about people of other lands and their customs, the art lecturer directs attention to the contributions which the people of these lands have made in the field of art and to the ways in which these contributions influence our own ways of living and thinking. Likewise when fifth-grade children are studying about Colonial life, the art lecturer helps them become better acquainted with early American arts and crafts and tries

to develop in these children an appreciation of the way in which usefulness and beauty were combined in these crafts.

Every Saturday morning these same lecturers conduct story hours at the art museum. These classes are open to all elementary-school children who wish to attend. The lecturer tells stories in which the children are interested and helps the children to make appropriate illustrations for the stories. Thus, along with the development of appreciation of good illustrations, the children are given actual training in art skills. From week to week the children themselves participate in the selection of stories to be used, and consequently there is a significant correlation between the literature used and the illustrative materials.

Free classes are held regularly at the Art Museum for children of special ability, selected through competitive art examinations. The special pupils are entitled to one two-hour lesson each week until they reach the age of sixteen.

Development of the language-arts-skills program.—In connection with the activities program carried on through integrating units, children learn the language arts. This year, however, a more intensive study is being made to determine how a cumulative program for the development of the fundamental language skills can be set up through special grade emphases, all learning being kept functional in nature but with activities so planned that the skills program may gradually advance step by step as the child passes from each grade into the next higher one. Representative teachers from each school are working in committees to allocate these grade emphases, and committees appointed by the directors are working with committees appointed by the Houston Teachers Association to determine not only the grade emphases to be realized but the best methods for teaching each skill. The development of such a functional language-arts program is not confined to the elementary schools but is being carried on into the junior and the senior high schools.

Study of the unit method in the elementary grades Last year a study group was organized in Nashua, New Hampshire, under the general direction of the assistant superintendent of schools, Maria P. Morrison, for the purpose of studying the unit method of instruction. One of the members of the group, M. Imelda Smith, in the *New Hampshire State Teachers' Association Bulletin*, describes her reaction to the experience as follows:

It was my good fortune this year to be given the opportunity for membership in a study group organized for the purpose of studying, experimenting with, and evaluating the unit method of study in the elementary grades.

Under the able leadership of our assistant superintendent of schools, the group of twenty teachers met bi-monthly for three months to listen to and discuss reports on units of work used in such progressive schools as the Lincoln School at Columbia University. Units of work used in other schools in the country were studied, and offered suggestions for our experiments

The remainder of the year was spent in organizing units of work which were tried out in the different grades. In connection with the organization of these units, a bibliography was made of all books available in the different grades and schools, which would be valuable in the units to be studied.

It was arranged by the teachers that the study group be afforded the opportunity of attending the culminating activities of the different units to evaluate results. . . .

The notable results which I would list as gained from this type of study are: (1) opportunity for pupil leadership, (2) improvement in self-expression, (3) co-operation in group work, (4) care for individual differences, (5) a development of initiative, (6) a better understanding of the occupations of man, (7) an appreciation of community life.

Planning for the adjustment of pupils in Grade I James M. Spinning, superintendent of schools of Rochester, New York, has established a special committee to consider what can be done in the way of more careful planning for the adjustment of *all* first-grade children. The committee has given attention to testing and promotional procedures and has initiated a program of teacher education through bulletins and meetings. The committee has prepared a series of mimeographed statements dealing with such matters as underlying philosophy, aims of the adjustment period, activities to realize aims, centers of interest, environment, and organization.

THE TEACHING LOAD AS THE TEACHER SEES IT

IN THE past perhaps most people, including school administrators, have been disposed to think of the teacher's load in terms of class size and the number of class periods each day or week. But new concepts of the educational process have brought about, or are bringing about, a fundamental change in the pattern of the teacher's daily life—a change which spells enlarged responsibilities and increased nervous strain. Today the progressive teacher must adjust classroom activities to the individual differences and needs of pupils; must assume some responsibility for the physical and the emotional health of the child; must keep detailed records and make frequent reports; must adjust to new administrative policies as, for example, promotions without failure; and must maintain community contacts and attempt to integrate the work of the school with life as it is lived in the local environment.

In the future it should be possible to give the whole matter of the teacher's load a more critical examination and to shape policies in the light of tested experience. A declining birth-rate will mean fewer pupils in the elementary schools and a slowing-down of the rate of increase in high-school enrolments. As the educational burden grows lighter, so far as numbers are concerned, it should prove possible to give a new emphasis to the quality of the educational services which the community provides. School boards and superintendents, before

TABLE 1
TEACHERS' JUDGMENTS AS TO THE REASONABLENESS
OF PRESENT TEACHING LOADS

GRADE LEVEL	NUMBER OF CASES	RATING GIVEN TO PRESENT LOAD					
		Number				Per Cent	
		Light	Reason- able	Heavy	Ex- treme	Light and Reason- able	Heavy and Extreme
Primary	697	18	408	245	26	61.1	38.9
Intermediate	952	19	534	362	37	58.1	41.9
Junior high school . .	837	10	438	355	34	53.5	46.5
Senior high school . .	1,221	28	614	491	88	52.6	47.4

deciding to cut the teaching staff as the school population declines, should consider carefully whether it would not be a better policy to reduce the teaching load of many members of the staff.

Any attempt to measure the load which teachers carry must take into consideration the opinions of teachers themselves. For that reason a recent investigation made by the Research Division of the National Education Association is especially timely and important. Published under the title *The Teacher Looks at Teacher Load*, the study is essentially an appraisal of present teaching conditions as seen by the classroom teachers themselves.

Table 1, copied from the report, presents a summary of teachers' judgments with respect to the reasonableness of present teaching loads. It will be noted that about 40 per cent of the elementary-

school teachers and nearly 50 per cent of the high-school teachers report their loads as heavy or extremely heavy. Among elementary-school teachers who feel that their loads are heavy or extreme, the highest percentage is found in schools enrolling fewer than a hundred pupils.

TABLE 2
SOURCES OF UNDULY HEAVY OR EXTREME PRESSURE REPORTED
BY 20 PER CENT OR MORE OF THE TEACHERS

Sources of Pressure for Elementary Teachers	Per Cent Re- porting It Heavy or Ex- treme	Sources of Pressure for Secondary Teachers	Per Cent Re- porting It Heavy or Ex- treme
Class interruptions: bulletins, announcements, errands, special events	28 3	Class interruptions: bulletins, announcements, errands, special events	31.1
Adapting class program to individual differences in ability, interest, need	26 1	Daily load of correcting, grading papers, notebooks, tests, home work, etc	26 2
Adapting promotion standards to meet a "no-failure" ideal without neglecting "minimum essentials" expected by the school or without endangering future school adjustment and progress of pupils	23 2	Classroom capacity; degree of overcrowding	25 6
Clerical activities—mimeographing class materials, work sheets, transcribing records, test results for central files, etc.	22 8	Total number of pupils assigned. Adapting promotion standards to meet a "no-failure" ideal without neglecting "minimum essentials" expected by the school or without endangering future school adjustment and progress of pupils	25 5
Total number of pupils assigned	20 8	School environment (noises and interruptions from street, playground, neighborhood, etc.)	23 8
Size of individual classes	20 3		23.1

The specific load pressures of which teachers are most keenly aware are of special interest. The elements making up what teachers regard as extremely heavy loads are presented in Table 2.

Teachers and school administrators throughout the country should study this bulletin with interest. It may be obtained from the Research Division of the National Education Association, 1201 Sixteenth Street, Northwest, Washington, D.C., at the price of twenty-five cents a copy.

A STATE-WIDE PROGRAM FOR THE IMPROVEMENT
OF INSTRUCTION

THE State Department of Education in Florida has initiated a vigorous program for the improvement of instruction in the schools throughout the state. As a part of the program it is preparing and publishing materials for the use of teachers and administrators. Among the bulletins which have recently appeared are the following: Number 1, *A Guide for Exploratory Work in the Florida Program for the Improvement of Schools*; Number 2, *Ways to Better Instruction in Florida Schools*; Number 3, *A Preliminary Guide to a Study of the Elementary School Curriculum in Florida*; Number 5, *Physical Education in the Secondary Schools*; Number 6, *Planning Curriculum Study with Local Groups*. These bulletins should be of interest to teachers, principals, and superintendents in other parts of the country. The general organization and content of the publication on ways to better instruction are described in the following paragraphs quoted from the initial chapter.

This bulletin consists of two parts which are different both in their purpose and development. Part I treats of those aspects of education which are both basic and general and which must be understood before any specific plan for the improvement of instruction can be intelligently evolved. Part II considers more specific problems which will arise when the implications of Part I are translated into action. Out of relation to each other, Part II loses much of its significance and Part I becomes mere theory, difficult to bring into practice.

Chapter ii, "Problems Which Challenge Florida Schools," presents a rapid but highly significant survey of the economic, social, and health conditions in Florida and in the United States as a whole which demonstrate the need for more effective education of Florida youth. It shows the flaws and the futility in the present school treatment of the ills of society. It might well be studied in conjunction with chapter vi, "The School in the Community," which shows something of the part the school may play in improving the greater society of which it is a part.

Chapter iii, "Tentative Point of View," makes clear the position of the bulletin in respect to the place of education in the world of today and the implications of modern philosophy and psychology for the school. It is the keystone chapter which maintains the relationships and significance of all the rest. It is not expected or desired, however, that the readers will unreservedly accept this point of view as their own. Each teacher or groups of teachers who wish to make worth-while accomplishments in the improvement of instruction must have a carefully thought out and defensible philosophy of his own or their own.

Chapter iv, "Aids in Defining a School's Objectives," suggests a procedure for developing and expressing such a philosophy, as well as a procedure for attempting to learn the real needs of the pupils of a school. When any present-day school seriously looks at its existing program with the real needs of its pupils in mind, it cannot fail to see a need for a reorganization of its curriculum and practices. This reorganization must, of course, be consistent with its philosophy. Many forward-looking schools are moving by one plan or another in the direction of the experience unit as the organization of instruction which so far best meets the needs of boys and girls. Chapter v, "The Organization of Instruction," discusses the ways by which this organization may be achieved, and chapter ix, "Large Unit Teaching," explains its psychological foundation and furnishes illustrations of its actual use.

School pupils, like everyone else, have to make many decisions, large and small, which profoundly affect their own future happiness and success and may affect the general welfare of society. In the past schools have done little to help young people act wisely in the situations where their futures as workmen, homemakers, and citizens are at stake.

Chapter vii, "Guidance," makes suggestions as to how a school may undertake to give its pupils concrete help in the successful and useful conduct of their lives. Chapter viii, "Living in the School," illustrates by actual example how children may become zealous and worthy citizens of a democratic society.

Pupils, teachers, parents, and other citizens are always consciously or unconsciously evaluating the success of the school according to their own knowledge of the activities of the school and their own conceptions of its proper functions. Such evaluation is necessary to progress, but there is great need for a better understanding of the bases on which a significant evaluation may be based and the means by which it may be achieved. Chapter x, "Evaluation," discusses this problem.

Obviously a program for the improvement of instruction of the scope suggested in this bulletin will make demands on teachers which many are not now ready to meet. The teacher who would assume and hold a worthy place of increasing usefulness in the new order must constantly grow to meet these demands. Chapter xi, "Growing in Service," discusses the directions such growth will take and gives suggestions as to how the teacher may increase his educational stature.

THE UNIVERSITY OF CHICAGO DINNER

THE University of Chicago Dinner, given annually during the meeting of the American Association of School Administrators, will be held in the Ivory Room at the Hotel Jefferson, St. Louis, Missouri, on Wednesday evening, February 28, 1940. Alumni, former students, and friends of the University are most cordially invited to

attend. It will assist the committee on arrangements if those who plan to be present will obtain their tickets in advance. Tickets are two dollars each, and they may be secured from Professor Robert C. Woellner, University of Chicago.

WHO'S WHO FOR JANUARY

The authors of articles in the current issue NELSON B. HENRY, associate professor of education at the University of Chicago.

LUTHER C. GILBERT, associate professor of education at the University of California. LEO J. BRUECKNER, professor of education at the University of Minnesota. FOSTER E. GROSSNICKLE, professor of mathematics at New Jersey State Teachers College, Jersey City, New Jersey. NETTIE J. MCKINNON, principal of Oak Avenue School, La Grange, Illinois. WILLIAM H. BURTON, director of apprenticeship and lecturer on the principles of teaching at the Graduate School of Education, Harvard University. WILLIAM C. REAVIS, professor of education and superintendent of the Laboratory Schools at the University of Chicago.

The writers of reviews in the current issue E. W. DOLCH, assistant professor of education at the University of Illinois.

KNUTE O. BROADY, professor of school administration at the University of Nebraska. R. L. MORTON, professor of education at Ohio University, Athens, Ohio. SOPHIA C. CAMENISCH, teacher of English at Chicago Teachers College. MILO L. WHITTAKER, head of the Department of the Social Sciences at Northern Illinois State Teachers College, De Kalb, Illinois. LESLIE W. IRWIN, chairman of the Department of Health and Physical Education in the Laboratory Schools of the University of Chicago.

FUNDAMENTALS OF DEMOCRATIC ADMINISTRATION IN CITY SCHOOL SYSTEMS

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THERE are six important aspects of administrative services in the public-school systems of this country which should be considered in a discussion of democracy in school administration. These six aspects of the general setting in which administrative policies are to be determined do not constitute an inclusive table of elements of the administrative process, but they will serve as a basis of differentiation between the valid and the invalid inferences which underlie many of the current pronouncements regarding both the advantages and the disadvantages of teacher participation in school administration. In this sense they may be regarded as fundamentals of democratic administration.

This chosen list of fundamentals includes three which will be recognized as obstacles to a revolutionary drive toward the supplanting of the administrative prerogative by any form of mass management and three others which signalize the impropriety and the futility of schemes of school management which are predicated on a vested-interest concept of the superintendency or on a blind disclaimer of the legitimacy and the force of the emerging demand for a widening of the base of administrative controls. Collectively, they help to define the limits within which both centralized and distributed responsibilities must be recognized in the formulation of administrative policies which are consistent with the social ideals of the times and which can be regarded as effective from the point of view of the purposes of public education in this country.

There are many indications that school administration is moving definitely and inevitably in the direction of more general use of co-operative procedures and that these co-operative procedures at appropriate times and in appropriate areas may well involve the entire

professional staff of the school system. This democratic tendency is not to be explained in terms of the occasional uprisings of organized teacher groups, righteous as these rebellions against autocratic practices have frequently been. On the contrary, democracy in school administration, as it is evolving in the cities of this country, is part and parcel of the growing professionalization of the teaching staffs of the school systems, including the administrative officers.

The conditions and the considerations which should not be ignored in formulating administrative policies, and which should accordingly be recognized as fundamentals of democratic administration, may be denoted as follows: (1) The extension of teacher participation in the administration of a local school system should be instituted gradually and in pace with teacher preparedness for such participation. (2) The size and the complexity of organization of city school systems require a certain degree of centralized control in order that confusion and waste in the operation of the schools may be avoided. (3) The functions of administration include important executive processes which are not matters of professional concern to the teaching staff. (4) The legitimate functions of administration should be conceived in terms of the conditions under which the schools are operating at any given time and should, therefore, be redefined from time to time in keeping with changing conditions in the schools. (5) Autocratic procedures in school administration are inconsistent with the generally accepted concept of democracy in education. (6) Teaching service has well-nigh attained the status of a profession so far as the city school systems of America are concerned, and a true profession may properly be expected to understand the administrative requirements of its field of service and to contribute to the improvement of administrative practices therein.

GRADUAL INTRODUCTION OF TEACHER PARTICIPATION IN ADMINISTRATION

The proposition that the process of making school administration more democratic, to the extent that this result is feasible and desirable, had best be advanced by easy stages is suggested by the history of education in this country and the devices which have contributed to educational progress. In the record of this progress there

are many indications that the improvement of conditions and practices in the American schools is, in no small degree, to be attributed to the establishment about a hundred years ago of the executive branch of the school organization and the gradual increase in the authority and prestige of the office of the city superintendent of schools. Only a few decades behind us the teaching staffs of city school systems were largely composed of an inadequately trained, almost transient group of persons who received meager compensations, struggled to maintain even a decent standard of living, and enjoyed at best a tolerant sort of respectability in the eyes of the adult population which grudgingly supported them. It is inconceivable that persons so equipped and so situated, intelligent as they generally were, could have marked the lines of development and measured the strides of progress which are the conspicuous attributes of our public schools of the past fifty years. On the contrary, it was inevitable that rather distinctly autocratic procedures would be instituted from the sheer necessity of keeping the staff and the facilities abreast of the rapidly growing school enterprise. Fortunately for the children in the schools and for the teachers as well, certain competent members of the professional personnel who were best qualified by training and leadership were chosen, in city after city, to serve as executive officers of the schools. Thus school administration became a professional service instead of merely a managerial function.

It is recognized, of course, that the teaching staffs of city school systems at the present time are largely recruited from the ranks of graduates of accredited teacher-training institutions and that they may readily acquire discriminating insights into the values or the deficiencies of existing administrative practices. They may contribute, and they frequently do contribute, many valuable suggestions regarding administrative procedures in the schools in which they work. This fact does not signify that administrative service generally is promptly to be raised to higher levels of either effective procedure or ethical procedure by a re-allocation of administrative controls so as to provide authoritatively for general participation on the part of the staff in the determination of administrative policies. While there are many teachers who are fully qualified to assume and to discharge acceptably the responsibilities of even an extreme form

of democratic organization, such competence is not yet a level quality of the teaching staff in most American cities. Furthermore, teachers notoriously dislike to retire from active service even when the age of compulsory retirement is reached. They rarely retire in advance of the compulsory ruling in recognition of continuing physical incompetence. They never retire voluntarily in recognition of professional incompetence. If we could be assured that all the teachers employed since 1925 are satisfactorily qualified to assume an authoritative responsibility in relation to the administration of the schools, it would appear that there is still about a generation to go in the process of democratizing the administrative function.

There is one other reason why gradual institution of teacher participation is proposed as the first fundamental consideration of democratic administration. Even if it be conceded that the general level of competence and the professional zeal of the teaching staff of a city school system are high enough to warrant the establishment of a participating plan of administration, the hundreds or the thousands of members of this staff obviously cannot, en masse, suddenly become experienced in dealing with administrative problems. The promise and the effectiveness of democratic administration in city school systems are most certainly to be realized by the gradual induction of the teaching staff into a carefully planned program of participation in administrative procedures. Professional superintendents began, long since, to confer with teachers regarding certain aspects of administration, and many of them have established, or have encouraged the establishment of, more or less formal arrangements for giving the teachers a voice in the determination of administrative policies. The wiser superintendents have sought to direct teacher deliberations and action with respect to administrative problems toward those aspects of administration which focus most directly on the teaching process or upon matters which affect the teachers personally. This policy is to be commended as both expedient and democratic. It is expedient because it protects the school system against the hazards of inexperienced judgment in administrative matters. It is democratic since it affords the teachers the best possible chance to acquire administrative experience without making mistakes which might discredit their services. The areas of partici-

pation may be widened as experience justifies. This plan is the democratic way to democratic administration in city school systems.

NECESSITY OF CENTRALIZED CONTROL

The second fundamental consideration regarding the nature of administration in city school systems is the fact that, because the school system is a sizable enterprise, some degree of centralized control is necessary to insure orderly procedure in the different units of the organization and to co-ordinate the variety of services and activities which are continuously in operation. In a large city school system the loss of time and the waste of opportunities which result from delays in executive action are much too frequent in occurrence and often much too serious in their consequences to be endured merely in recognition of the right of a large number of widely scattered individuals to participate in the discussion before needed action is taken. When large numbers of persons are involved, effective co-ordinating procedures cannot be provided under a plan of universal responsibility. It is not sufficient that the superintendent's leadership be recognized and accepted by the rank and file of teachers in a large school system. It is equally essential that he have the authority to deal with situations requiring executive action whenever they arise. Not the least of the advantages of such centralized control is the protection which it affords the teachers against possible interference or annoyance in connection with their daily work.

Also to be considered is the fact that the superintendent who adopts a policy of conducting the schools under a co-operating arrangement with the teaching staff is nonetheless responsible to the board and to the public for conditions and happenings while policies are being formulated or disagreements are being ironed out. His plan may have the approval of his board and the commendation of parents of many of the children in the schools, but, if things go wrong, he is, in the minds of the board and the people, still the superintendent and is held responsible. Furthermore, the public and the laymen who constitute the boards of education in cities are more likely to be impressed with the efficiency of the administration when things move with clocklike precision. This efficiency is difficult to achieve in a large school system except on the basis of highly cen-

tralized control. No matter how well qualified the staff may be for active participation in administrative affairs, and no matter how genuinely co-operative they endeavor to be, the natural clumsiness of mass performance and the normal lack of articulation in the reactions of many differently constituted persons are no match for the showmanship of a regimented personnel whose performance is dictated by a skilled technician.

EXECUTIVE PROCESSES WITH WHICH TEACHERS NEED HAVE NO CONCERN

A third consideration which obviously conditions the extent and the nature of teacher participation in school administration is the fact that teachers are not professionally concerned with certain areas of administrative service in city school systems. These areas may be roughly catalogued as the variety of services incident to the effective operation of schools which are commonly recognized as the function of business management. While teachers may be interested in the character of the annual budget from the point of view of the adequacy of the appropriations for instructional services and while they may properly desire to be heard with respect to the appointments of a new building to be constructed, they are not interested in, nor should they devote time to a consideration of, technical procedures of budget-making, accounting, purchasing, and the like.

DEFINING ADMINISTRATIVE FUNCTIONS

My fourth proposal is that the functions of administration should be defined in terms of the conditions under which the schools are operating. With reference to teacher participation in school administration, this proposal pertains chiefly to the professional status of the teaching staff. Earlier in this discussion it was noted that administrative procedures in city school systems developed along autocratic lines because for many years the schools were generally staffed with poorly trained teachers. That this condition has materially changed requires no demonstrative proof. The numerous reports on teacher supply and demand are significant chiefly as indicative of a trend that has for a number of years been steadily raising the standard of teacher qualifications throughout the country. Augmented by the effects of the depression, the trend toward higher

minimum standards for teacher employment has moved with increasing rapidity during the past ten years. In the light of these changes, administrative and supervisory practices in city school systems are rapidly abandoning the autocratic procedures which were necessarily adopted when properly trained teachers were not available.

No less significant in their bearing on the professional relation between the administrative and the teaching personnel of city school systems are the improvements in the compensation and the tenure of teachers. The psychological effect of respectable earning power has obliterated the stigmata of servility from the teaching class and has added tone and tenor to the teacher personality. Drastic coercive measures are not easily enforced upon people whose plane of living compares favorably with that of other competent economic groups in the communities in which they live. Again, the permanently established employees of an enterprise or an institution cannot be ignored, with respect either to their appropriate privileges or to their opinions, to any such degree as may be the case with those whose positions are insecure or temporary.

If, then, it may be said that the low level of teacher qualifications and compensation and the rapid teacher turnover of earlier years necessitated autocratic procedures in school administration, it may also be observed that the present status of teacher personnel does not admit of the continuance of such practices in any objectionable form.

INCONSISTENCY OF AUTOCRATIC ADMINISTRATION WITH GENERAL CONCEPT OF DEMOCRACY IN EDUCATION

The fifth fundamental consideration pertaining to this problem is that autocratic administrative procedures in school affairs are not in harmony with the general concept of democracy in education. The primary function of the public-school system of this country is to prepare young people for effective membership in the kind of society in which they will eventually assume adult responsibilities. To the extent that the schools are organized and the children are taught in neglect of, or in divergence from, this fundamental aim, to that extent they are not legitimately public schools. Since pupils acquire

much of their education through processes of imitation and absorption, there is a challenging absurdity in the arrangement which places them in the care of a teaching staff subject to the rigors of autocratic control, with the expectation that they may thus acquire needed insights into the nature of a democratic society.

PROFESSIONAL ATTITUDE TOWARD ADMINISTRATION

Finally, it may be well to recognize the fact that teaching is really a profession. Of course, there are thousands of persons engaged in teaching, some of them in administrative positions, who with respect to both their professional training and the value of their services fall below the level of acceptable professional standards. Teachers and administrators of this type are, however, rapidly disappearing from the ranks, especially in the city school systems of the country, and present practices of teacher selection are providing fairly adequate safeguards against their presence in the schools of the future.

The rapid professionalizing of the teaching staffs demands further extension of teacher participation in city school administration, whether considered from the point of view of the teachers or that of the superintendents. It may be that the way to get the most profitable services at the hands of unskilled and unresourceful workers is to tell them specifically what to do and how to do it. If it were desirable, in the light of the purposes of public education, to run the schools with unskilled teaching service, we could properly revert to the Lancasterian system. The present level of teacher qualifications is, from every point of view, an essential factor in the maintenance of a democratic school system. It has been attained through years of experimentation and effort on the part of teachers, administrators, and teacher-training institutions. The best way for school administrators to secure the most valuable returns from the services of their professional staffs is to recognize the teachers' competence and to allow adequate freedom for the expression of the teachers' professional interests and judgments in the determination of the administrative policies governing their services. Moreover, teachers of this generation are fully prepared to relieve superintendents of much of the administrative routine which necessarily devolved upon the supervisory officers of the schools of earlier days. The superintendent would stand in his own light and reduce the efficiency of his own

performance if he should neglect to utilize the services of his staff to the extent that he can do so without interfering with the teaching process or unduly increasing the teacher load.

More significantly, however, it is important to recognize the professional status of teachers as the only means of insuring the professional administration of the schools. Teachers will not long maintain a professional outlook and attitude under a denial of equality of membership in the teaching profession. There is no footing in the domain of public education in the United States for a profession of school administration apart from, and unrelated to, the profession of teaching. A professional organization is not internally stratified; it builds no hierarchies. It utilizes all its intellectual resources and recognizes no minority group as one clothed with autocratic power. Teaching could not live as a profession if superintendents determined the standards and the policies of the profession and gratuitously admitted teachers as members of lower professional rank. Evidently, therefore, administration in city school systems of the present day is essentially democratic, or it is not professional.

The most important aspect of all these considerations relative to democratic administration in city school systems is the fact that the superintendent-teacher relationship in democratic administrative procedures is a reciprocal relationship involving equality of responsibility for the successful working of the procedures as well as equality of privilege and participation. That the efforts in the direction of democratic administration have not always been crowned with success is a familiar fact to all. There is no need to attempt to explain the failures. Moreover, it is easier to explain why superintendents and their staffs in some places, and in some respects in many places, appear to be insensitive to the values of democratic procedures. That explanation lies in the realistic fact that, regardless of the professional qualifications of superintendents or teachers, when superintendents fail to recognize the professional principle of reasonable participation in administrative affairs on the part of other members of the profession, their teachers are likely to organize or to use existing organizations for the promotion of selfish rather than professional interests. Conversely, when teachers fail to understand, or refuse to recognize, the legitimate functions of executive responsibility, their superintendent is likely to resort to autocratic rule.

A GENETIC STUDY OF GROWTH IN PERCEPTUAL HABITS IN SPELLING

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CERTAIN investigations¹ of eye-movements in learning to spell have identified growth characteristics in orthographic perceptual habits by the technique of analyzing records of comparable groups of subjects at different grade levels. The investigation here reported extends these findings by following the same group of individuals from grade to grade.

Eye-movement records were obtained with a modified form of the photographic apparatus used in the educational laboratories at the University of Chicago and built there through the courtesy of the University authorities. The first records were taken early in the spring of 1937 when the pupils were of high-fourth-grade standing; the second set was taken a year later when they had reached high-fifth grade; the third set, early in 1939 in the high-sixth grade.

The discussion is based on six sets of records complete for the three years. The original group numbered fifteen, but removals and absences reduced this total.

The pupils were enrolled in the Le Conte Public School in Berkeley, California. The teaching of spelling there makes use of graded individual spellers² which call for pretesting, directed study, independent study, individual checking of misspelled words, progress tests, reviews, and a final test. Directions for word study include pronouncing the word, closing the eyes and trying to see each letter

¹ a) Luther C. Gilbert, *An Experimental Investigation of Eye Movements in Learning To Spell Words*. Psychological Monographs, Vol XLIII, No. 3. Princeton, New Jersey: Psychological Review Co., 1932.

b) L. C. Gilbert and D. W. Gilbert, "Increasing Speed of Perception in Learning To Spell." Unpublished study.

² J. R. Croad, E. P. O'Reilly, and W. J. Burkhard, *Individual Spelling Book: Fourth Grade, Fifth Grade, Sixth Grade*. California State Series. Sacramento, California: State Department of Education, 1935.

and each syllable, checking with the book, closing the eyes again for a visual picture, and checking again with the book. The speller provides for dictionary work, syllabication, playing spelling games, and using words in sentences. School supervision encourages teachers to use their initiative in modifying the method to meet particular needs.

In this study the following words were used each year:

1937	1938	1939
definitely	definitely	definitely
accommodate	accommodate	rheumatism
electricity	conscientious	conscientious
questionnaire	rheumatism	counterfeit
committee	penitentiary	chandelier

One word, "definitely," was common to all three lists. Two words, "definitely" and "accommodate," appeared in both fourth- and fifth-grade lists. "Rheumatism" and "conscientious" were common to both fifth- and sixth-grade sets. At each level there was at least one word not used in any other grade.

The words are difficult, but the selection of difficult words was necessary in order to preclude the elimination of too large a percentage of records because of correct pre-spelling. Furthermore, word difficulty for these subjects could be predicted only on the basis of the performances of other pupils, since it was necessary to follow the pretest immediately with study before the camera in order that no learning might take place in the interval between testing and study.

In the pretesting the experimenter dictated each word, gave it in a sentence, and had the pupil write it down. Then the pupil was told that he would be photographed while he studied, was asked to learn the words according to his usual manner of study, and was told that he would afterward be retested.

The words were typewritten on individual cards placed at reading distance on the camera ledge. Two black dots appeared on each card, one just above the first letter of the word, the other just above the last letter. Preliminary fixations on these dots facilitated the gauging of word length. These fixations were explained, and two practice cards were provided to insure understanding of the signals.

A curtain card covered the word but revealed the dots. After the word was pronounced, the curtain card was removed while the pupil studied; at the instant study was completed, the curtain card was replaced. Immediately after the last word had been covered, the pupil was released from the camera and seated at a table for the final test.

The data in Table 1 show that all six subjects were of average intelligence. Their relative spelling abilities are indicated by their scores on a 160-word spelling test which was given early in 1937 and which was made up of the words to be taught during the spring semester.

TABLE 1
INTELLIGENCE QUOTIENT AND NUMBER OF WORDS
MISSPELLED ON 160-WORD TEST FOR
SIX PUPILS STUDIED

Pupil	Intelligence Quotient	Number of Words Misspelled
A	103	17
B.	108	54
C.	93	45
D.	98	66
E.	107	24
F.	108	78

Preliminary spelling efficiency for each of the three sets of five words was computed by determining the percentage of letters correctly given. Omissions, additions, and substitutions were deducted as errors. Comparison of pre-spelling efficiency and post-spelling efficiency constituted the basis of computation for the percentage of possible gain realized through study before the camera. Averages computed on the basis of the full set of five words learned at each level are shown in Table 2. In view of the necessity of pretesting immediately prior to the photography, minor differences in initial difficulty could scarcely be avoided. The averages for the six subjects indicate that the degrees of difficulty for the three sets of words were similar, and the similarity is emphasized if it is borne in mind that a single error in a ten-letter word reduces the efficiency for that word by 10 per cent. Likewise, the averages of the percentages of the possible gain realized through study are similar for the three grades.

Grade-to-grade growth in perceptual habits is apparent in the consistent decrease in time required for study. The table shows a reduction of approximately four seconds per word between Grades IV and V and a further reduction of approximately two-thirds of a second between Grades V and VI. Since pause time shows no parallel decrease, it follows that the reduction is effected primarily by the employment of fewer fixations, and this inference is borne out by the grade-to-grade fixation averages. There is not only a decrease from grade to grade in the average number of regressions but also a decrease in the extent of relation between regressions and the total number of fixations. Not all spelling regressions indicate immaturity. Certain types of accommodation regressions, backward-sweep regressions, and backward-study regressions appear even in mature records. Other types, however, such as oscillation regressions, pick-up regressions, and study-by-parts regressions often tend to disappear with maturity.

Table 2 presents data for all five words studied at each grade level. Table 3 selects the word "definitely" for special analysis. This word was used in 1937, in 1938, and again in 1939. As might have been anticipated, each year brought out a better preliminary spelling performance than the preceding year. The percentage of the learning task accomplished remained fairly constant from year to year, however.

The fourth-grade study time for the six pupils was reduced nearly half in Grade V, and the fifth-grade time was reduced by more than a fifth in Grade VI. Pause time shows little change. The minor increase at the fifth-grade level is due to the unusually long fixations of two subjects. The rise is negligible and probably would not appear if the number of subjects should be substantially increased. The fixation averages per word and per letter and the regression averages decrease consistently from year to year.

The data for the two words new to the list in the year in which they appear are presented in Table 4. The words are not included in the spellers and presumably had not been studied prior to the investigation. The new fourth-grade words were "accommodate"

TABLE 2
RESULTS ON SPELLING OF FIVE WORDS BY
SIX PUPILS AT THREE PERIODS

Characteristic Measured	1937 High-fourth Grade	1938 High-fifth Grade	1939 High-sixth Grade
Average pre-spelling efficiency:			
Pupil A.	79.0	68.0	66.5
Pupil B.	44.0	59.4	63.2
Pupil C.	71.8	70.4	70.8
Pupil D.	49.3	63.4	59.2
Pupil E.	57.8	66.0	67.0
Pupil F.	49.8	50.8	57.6
Average.	58.6	63.0	64.1
Average percentage of possible gain realized:			
Pupil A.	13.4	28.6	44.8
Pupil B.	59.0	25.0	29.8
Pupil C.	40.0	60.2	45.4
Pupil D.	6.7	10.0	37.4
Pupil E.	39.4	31.6	14.5
Pupil F.	26.6	6.0	14.0
Average.	30.9	26.9	31.0
Average time per word (in thirtieths of a second):			
Pupil A.	324.2	242.4	233.3
Pupil B.	575.4	256.8	409.4
Pupil C.	366.8	246.6	126.2
Pupil D.	328.3	173.6	141.4
Pupil E.	395.2	346.8	327.3
Pupil F.	286.6	287.0	196.2
Average	379.4	258.9	239.0
Average time per fixation (in thirtieths of a second):			
Pupil A.	11.3	15.0	13.3
Pupil B.	15.1	15.9	15.4
Pupil C.	15.2	14.2	12.6
Pupil D.	13.1	15.0	13.3
Pupil E.	16.1	17.7	15.6
Pupil F.	11.3	10.7	10.5
Average.	13.7	14.8	14.4
Average number of fixations per word:			
Pupil A.	28.6	16.2	17.5
Pupil B.	38.0	16.2	26.6

TABLE 2—Continued

Characteristic Measured	1937 High-fourth Grade	1938 High-fifth Grade	1939 High-sixth Grade
Average number of fixations per word— <i>continued</i> .			
Pupil C	24.2	17.4	10.0
Pupil D	25.0	11.6	10.6
Pupil E	24.6	19.6	21.0
Pupil F	25.4	26.8	18.6
Average	27.6	18.0	17.4
Average number of fixations per letter:			
Pupil A	2.6	1.4	1.3
Pupil B	3.5	1.4	2.5
Pupil C	2.2	1.6	0.9
Pupil D	1.4	1.0	1.0
Pupil E	2.3	1.5	1.6
Pupil F	2.4	2.4	1.7
Average	2.4	1.6	1.5
Average number of regressions per word:			
Pupil A	9.8	4.2	3.2
Pupil B	15.8	4.6	8.8
Pupil C	8.4	3.4	1.6
Pupil D	10.0	3.8	2.4
Pupil E	9.2	5.2	4.6
Pupil F	9.6	10.4	6.2
Average	10.5	5.3	4.5

TABLE 3
RESULTS ON SPELLING OF WORD "DEFINITELY" BY SIX PUPILS
AT THREE GRADE LEVELS

	1937 High-fourth Grade	1938 High-fifth Grade	1939 High-sixth Grade
Average pre-spelling efficiency	51.7	63.3	71.7
Average percentage of possible gain realized	25.7	22.2	22.2
Average time per word (in thirtieths of a second)	458.8	240.8	188.0
Average time per fixation (in thirtieths of a second)	14.5	14.9	14.3
Average number of fixations per word	31.7	16.8	14.3
Average number of fixations per letter	3.2	1.6	1.4
Average number of regressions per word	12.8	4.8	4.0

and "questionnaire," the fifth-grade words were "rheumatism" and "penitentiary," and the sixth-grade words were "counterfeit" and "chandelier."

The table indicates that the two new sixth-grade words were somewhat easier than those for the other grades and also that the sixth-grade pupils realized the largest percentage of the possible gain. The reason for the small gain in Grade V is not entirely clear. The *initial* attempts to spell "rheumatism" and "penitentiary" were very creditable, but the correction of errors proved difficult.

TABLE 4
RESULTS IN SPELLING OF TWO NEW WORDS
BY SIX PUPILS IN THREE GRADES

	1937 High-fourth Grade	1938 High-fifth Grade	1939 High-sixth Grade
Average pre-spelling efficiency	61.0	60.8	74.0
Average percentage of possible gain realized	28.0	15.3	38.3
Average time per word (in thirtieths of a second)	397.4	241.0	199.0
Average time per fixation (in thirtieths of a second)	13.4	14.8	13.3
Average number of fixations per word . .	29.7	16.3	15.0
Average number of fixations per letter . .	2.5	1.4	1.4
Average number of regressions per word . .	11.1	4.6	5.2

The increase in pause time at the fifth-grade level is again apparent but slight and is due, as noted previously, to the aberrations of two pupils. The total time per word and the fixation averages tend to decrease from year to year. Regression averages depart from the usual pattern, however, by increasing in Grade VI after a decrease in Grade V. The phenomenon is easily explained by direct reference to the eye-movement records. "Counterfeit" contains the *ei* combination, "chandelier" the *ie* combination, and a number of regressions appear to have been due to these sequences.

It is of interest to consider not only group averages as indications of growth trends but also the characteristics of individual records as they relate to methods of attack in study. Figure 1 presents the three records of Pupil A for the word "definitely." This pupil is a good but not an excellent speller. In 1937 he pre-spelled the word

"definatley." After study before the camera he spelled it "definitley." His record shows 33 fixations totaling 369 thirtieths of a sec-

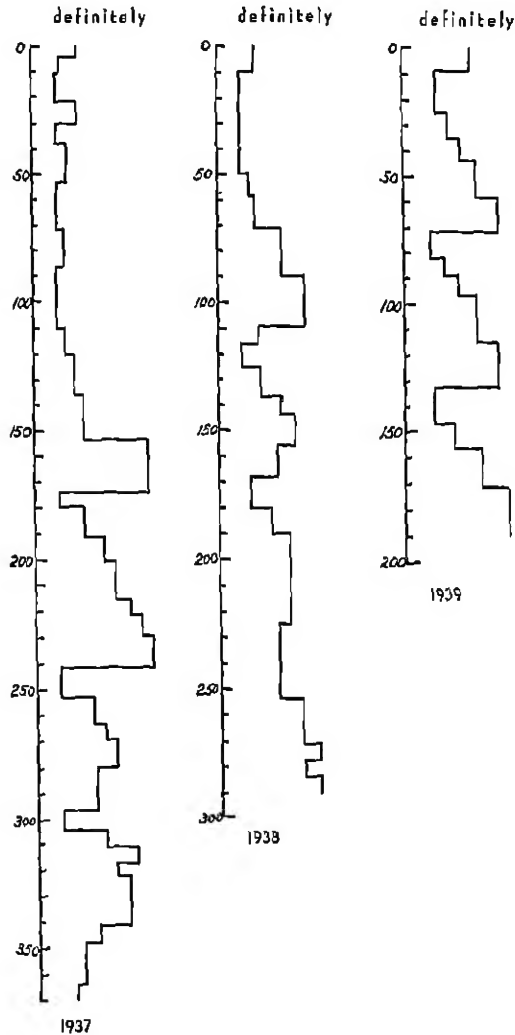


FIG. 1.—Three eye-movement records of Pupil A during study of "definitely"

ond. The first part of the record indicates repeated stress on the first part of the word, which was pre-spelled correctly. The second part of the study consists of a cross-passage over the word as a whole.

Thereafter the attention was centered on the midsection of the word with the resultant correction of *a* to *i* in the final spelling. The end of the word was neglected, and the *ley* error was repeated.

In 1938 the same subject pre-spelled the word "definetly" and post-spelled it "defenitly," correcting one error but adding another. The usual preliminary fixation toward the middle of the word and the regression to a good starting position occur. There follow a survey of the word as a whole, repeated inspection of the middle errors, and finally some attention to the end of the word. The study employed 20 fixations, totaling 290 thirtieths of a second.

In 1939 the same boy pre-spelled the word "defenititon," probably switching midstream to *definition*. His post-spelling was correct. This time he required but 15 fixations, totaling 189 thirtieths of a second. After the usual mid-fixation the study consists of three orderly cross-passages.

The growth here in visual attack is striking. In 1937 the word contained letter combinations which for this pupil were new and difficult. Immaturity of judgment is evident in his indiscriminating attention to an easy section of the word and in his neglect of a difficult section. In the following year there is indication of improvement in discrimination. By the third year the letter combinations are relatively familiar, and the study represents a type of simple checking procedure, employing three surveys with a broad recognition span and no detailed analysis of parts.

To be sure, not all the records are so strict in their adherence to the normal growth pattern. The records of Pupil D are examples in point. Pupil D is a poor speller who in 1937 pre-spelled the word "defoney." Figure 2 shows that, during the first study period before the camera, she made 36 fixations totaling 533 thirtieths of a second. The method of attack is strikingly irregular and immature. After the typical midway fixation the eyes sweep back to the beginning of the word and then, in one move, to the *t*. The jump from the first to the seventh letter was clearly too broad, and there was a brief regression to the *i*, then another overbroad jump to the end of the word. The pupil then studied backward, focusing her attack on the second *i*. This procedure was followed by a forward survey with movements too broad to be effective at this level of maturity.

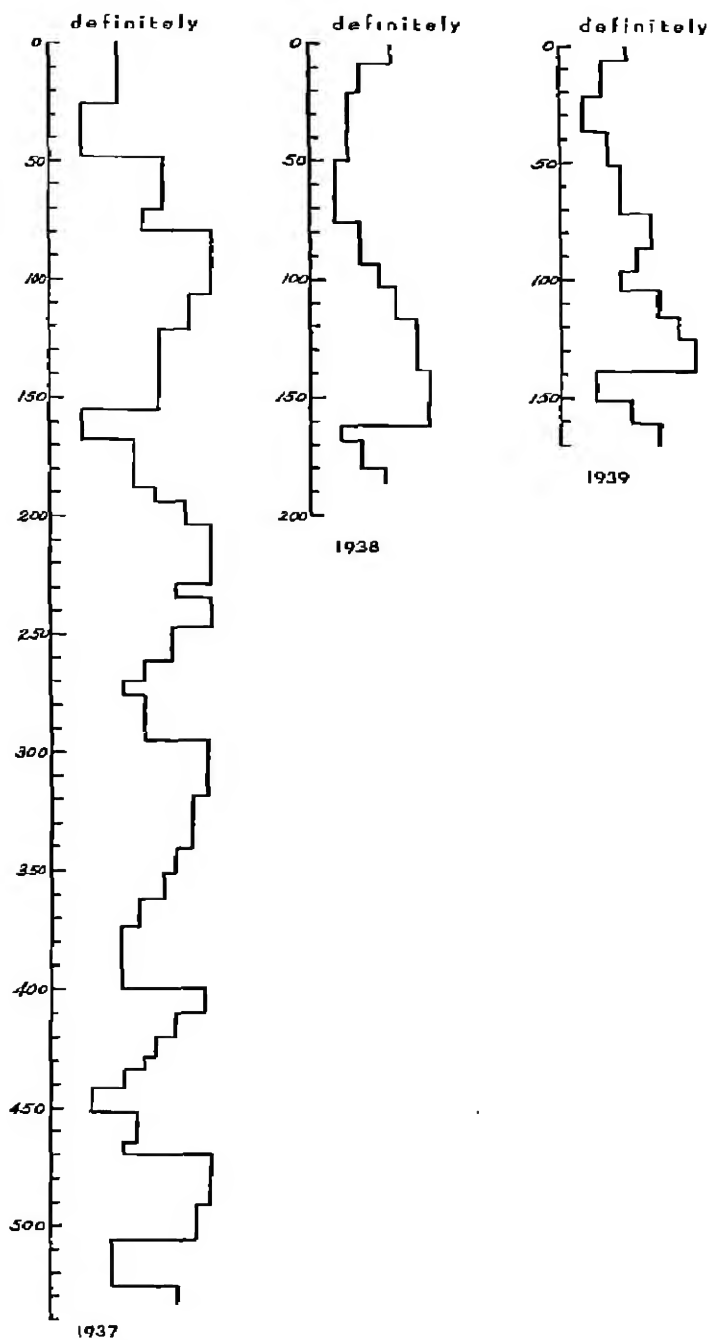


FIG. 2.—Three eye-movement records of Pupil D for "definitely"

From there on the attack centered on the last seven letters with noteworthy backward study. A certain discrimination is evident in the failure to waste effort on the easy part, *def*, but otherwise the plan may be described as detailed, irregular, and relatively ineffective. The final spelling was "defenly."

A year later Pupil D pre-spelled the word "defanetally." At first glance her study method appears to have matured at an incredible rate during the interval. The ends of the word carry no fixations. There are but twelve pauses, and these appear in systematic order. The pauses are neither unduly long for this pupil nor irregular in duration, and there is no evidence of detailed analysis of parts. Without an objective check on the gain, the record would appear to denote phenomenal growth. The maturity is specious, however. The final spelling was an exact repetition of the pre-spelling.

In 1939 the word was pre-spelled "deffently." The study record shows 14 fixations totaling 170 thirtieths of a second. There is no detailed attention to the easy sections *def* or *ly*, and there is clear evidence of concentration on the difficult midsection. While the fixations are more numerous than in 1938 and the pattern more involved,

the procedure is actually more mature in that it is more discriminating with respect to the individual's needs. The post-spelling was "defintely," which represents a 75 per cent gain.

If the 1938 no-gain record is disregarded and the 1937 record is contrasted with the 1939 record, the normal growth tendencies are apparent. The latter shows fewer and briefer fixations and a plan of attack better organized to clear up the individual's difficulties. An essential characteristic of growth is increased judgment as to what is required.

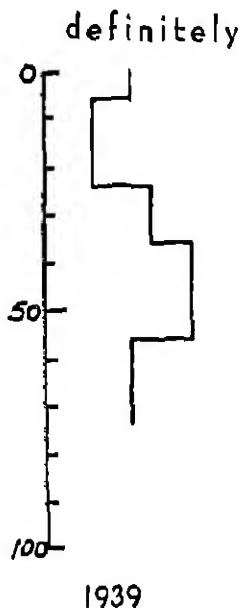


FIG. 3.—Record of a sixth-grade superior speller—1939 —for "definitely," which was pre-spelled correctly.

Limitations of space prevent the presentation of sample records from all six subjects. It is of interest, however, to present a single typical record of another pupil, who belonged to the original group of fifteen but who was later eliminated because of absence in 1938. She is a superior speller. In 1937 she pre-spelled correctly two of the five words used in the investigation (and misspelled but two words on the 160-word test). In 1939 she spelled correctly all but one of the list of five.

Figure 3 presents the record of this excellent speller for the word "definitely," correctly pre-spelled and correctly post-spelled. At the time of her study before the camera, she was not told that her original spelling was correct. The study record begins with the typical midway fixation and regresses to the *e*. Two forward moves cover four and three letters, respectively. That is, the recognition span is so broad with respect to these letter combinations that she is able to check over the entire ten letters in a cross-passage of three fixations. The study ends with a final midway pause. Although some of the pauses are long, the method is mature and the study represents a simple verification procedure.

Both individual and group findings from this three-year study support the trend of the findings of previous investigations in identifying growth characteristics in perceptual habits in spelling. The average pause time, for example, shows little change within these grades even with certain variations in word difficulty. At these levels growth is more apparent in the tendency to decrease the number of fixations and regressions and develop a more effective method of attack.

Young learners explore new words minutely. Increased familiarity with letter combinations results. The principle of synthesis operates so that recognition proceeds with increasing regularity and width of span, but some letter combinations become familiar before others. Greater maturity assists the learner in differentiating between hard and easy sections. The more mature the learner with respect to a word of a given difficulty, the closer his study approaches the simple verification reaction.

TYPICAL RESEARCH RELATING THE CURRICULUM TO CHILD DEVELOPMENT

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THE scientific study of the curriculum represents one of the major fields of research in education. This movement began about thirty years ago. In its early stages the approach was largely analytical. For example, courses of study and textbooks were analyzed to determine the topics that they included; newspapers, books, and other materials were examined to find the vocabulary that they contained, the numbers that appeared in them, the places and the persons that were mentioned in them, and other sorts of descriptive information about their contents. Attempts were also made to analyze the objectives of the various areas of the curriculum. The investigations by Bobbitt (2) in this field are typical of this kind of research. Psychologists carefully catalogued the skills and the specific abilities involved in such fields as reading, arithmetic, and language. In a word, the emphasis in the early stages of curriculum research was on the analysis of the *contents* of the curriculum.

In recent years the approach has definitely shifted from the analysis of the contents of the various areas of subject matter to the study of the developmental process, as revealed by the changes that take place in the learner either as a result of the natural growth processes (for instance, increase in height and weight) or as a result of the influences of the environment, more specifically, the educational program. In other words, the emphasis has shifted from the analysis of subject matter to the study of the learner and his development.

This shift of emphasis has been due to a number of influences. In the first place, the child-study movement, which has yielded a great deal of information about the development of the young child, has been extended to include the study of the growth of older children.

In the second place, those investigators who had carried on research dealing with the analysis of the contents of the curriculum were faced by the problem of determining the point in the course of study at which any given body of subject matter could be taught most effectively and appropriately. No basis of gradation was inherent in these analytical procedures. That the organization of the curriculum was faulty was evident from the large numbers of pupils who did not achieve satisfactorily—a fact revealed by the results of numerous age-grade and promotion studies. Furthermore, the results of achievement-test surveys revealed an astonishing range in the ability of the pupils at all grade levels. Diagnostic studies also showed that many pupils were experiencing serious difficulties because of the failure of the school to adjust either its program or the instructional procedures to differences in the interests, the needs, and the abilities of the learners.

The awareness of these and other shortcomings of the educational program led to investigations the primary purpose of which was to consider means of “adapting the school to the child” rather than the current plan of “adapting the child to the school.” Such questions as the following arose: When should the teaching of reading and arithmetic begin? At what point in the curriculum should any given topic, a particular group of words, or a number process be taught to insure effective mastery? What books should be made available for children at the various stages of development if consideration is to be given to their interests as well as to their reading ability? What are the needs in the field of oral and written language expression of children of different chronological and mental ages? What kinds of activities in the various areas of the curriculum will contribute most effectively to the continuous growth of the learner in socially desirable ways? The bearing of these questions on curriculum construction is obvious. A few illustrations of typical research dealing with several of these matters will make clear the relation between child development and the curriculum.

The first example is taken from the field of reading. It is a widely recognized fact, demonstrated by many reports, that inability to learn to read has resulted in an exceedingly high rate of nonpromotion of pupils in the primary grades of many school systems. A few

years ago a number of investigators, among them Betts (1), Monroe (9), Gates (5), and Van Wagenen (10), began to make studies of the characteristics of children in these grades for the purpose of discovering, if possible, the reasons for the failure of many children to profit from instruction in reading. From these studies the concept "readiness for reading" developed. The position has been taken that under present conditions many children in the early primary grades are not "ready" to begin the study of reading because of such factors as mental and social immaturity, crucial deficiencies of vision and hearing, lack of interest in reading, and meager vocabularies. Standard tests for measuring these and similar aspects of reading readiness have been developed. In the early stages of the studies of reading readiness, the policy was adopted of merely delaying the date of beginning reading for pupils who apparently were not ready for a formal reading program; nothing was done to get them ready. The inadequacy of such a program has been revealed by researches such as that of Gates and Bond (7). The present practice in many modern schools is to carry on a program intended to prepare the children for reading and to administer a carefully selected series of readiness tests to pupils who are near the level of the school at which formal instruction in reading is usually begun. Then an effort is made to adjust teaching procedures and the materials of instruction to the individual limitations and needs of the children as revealed by these tests, which are, in fact, forms of diagnostic tests. This adjustment should ideally be made before, as well as after, the beginning of formal reading instruction. This program is clearly more acceptable than the earlier one of merely changing the time of beginning reading on the ground that at a later date the pupils, as the result of the action of a natural growth process, will automatically be "ready" to read. Gates (6) has pointed out that the results of reading-readiness tests apparently measure the success of the instructional program, the purpose of which should have been to prepare children for formal reading instruction. Where well-organized reading-readiness programs are used and instruction in reading is carefully adjusted to the limitations and the needs of the individual pupils, nonpromotion in the primary grades is reduced to a minimum. This is an example of how research in child development has definitely affected curriculum practices.

Investigations undertaken for the purpose of determining the optimum points at which to teach particular items, processes, or courses also show the relation between child development and the curriculum. An excellent example of this kind of research is the work of the Committee of Seven in the field of arithmetic. This committee conducted a study on a large scale to determine the points at which to teach the various number processes, for example, long division and some of the phases of measurement. The results of this important series of studies are restated and summarized in the 1939 Yearbook of the National Society for the Study of Education. The chapter by Washburne (3) gives the optimum mental ages at which, according to the most recent research of the Committee of Seven, the various processes can be learned by children. As is well known, the Committee of Seven has amply demonstrated that much of the difficulty experienced by pupils in arithmetic is due to the facts (1) that the traditional sequence of teaching arithmetic processes according to the logic of the number system is not the same as an order based on learning difficulty and (2) that the processes being taught in the various grades are too difficult because the pupils either lack the skills and the concepts fundamental to the processes or do not have the mental ability necessary to master the work, or for both reasons. These studies show when a given arithmetic topic *can* be taught but not when the topic *should* be taught.

The results of these investigations have led to a radical reorganization of the arithmetic curriculum in this country. The work in the primary grades has been greatly simplified. Numerous rearrangements of content have been made, and topics usually taught in the intermediate grades have been shifted to higher levels. In very few places have the recommendations of the Committee of Seven been carried out completely. As soon as present gains have been consolidated, it is likely that even more radical shifts of subject matter will be made than have been made to date. For example, the Committee of Seven (11) recommended that the process of long division should not be taught until the pupil reached a mental age of twelve years and seven months. However, recent research has shown that there is a wide range in the difficulty of various phases of this process. Some parts of the process are quickly and easily learned by fifth-grade pupils; others should be delayed until Grade VI. Other parts of the

process are too difficult for pupils in both Grades V and VI and should be taught in Grade VII to insure reasonable likelihood of mastery. New data on this point, based on a further analysis of the items included in the original test of the committee, are presented in the Thirty-eighth Yearbook of the National Society for the Study of Education in Washburne's summary of studies by the Committee of Seven (3). This plan of spreading the learning of long division over a number of grades may be much more satisfactory than the original program proposed by the Committee of Seven, namely, teaching the whole process of long division to completion as a single major unit of the curriculum. Under a program of "paced" instruction spread over a number of years and organized on an individualized basis, the process of long division, which now is extremely difficult for many children, would be easily and successfully mastered. It is, of course, possible that a wiser program would be to delay the teaching of the entire process until even the most difficult steps can be successfully learned by the individual or the group concerned.

Similar findings for other processes suggest the further need of the regrading of a number of topics. For example, there is reason to believe that addition and subtraction of like fractions are much easier processes than the same processes with unlike fractions. Yet the usual practice is to teach these together in the same grade. It seems likely that the work of the Committee of Seven has merely broken the ground for a more extensive study of the optimum points in the development of each pupil at which to teach the elements of the various number processes. There is likely to result a curriculum in arithmetic much more closely adjusted to the rate of development of individual children than is the present curriculum.

The procedures used by the Committee of Seven are well adapted to the study of the gradation of materials in other fields of subject matter, for example, foreign language, written composition, reading, and science. The Committee on Maturity of the National Society for the Study of Education which prepared the 1939 yearbook was able to locate few studies in fields other than arithmetic which gave definite information, based on experimental evidence, concerning the optimum points at which specific items, skills, topics, or processes included in these areas can be taught with some assurance that they

will be mastered by pupils of given stages of development. This field of research has barely been touched. It offers a rich opportunity for experimentation in curriculum-making.

Studies of the needs of children at various levels of development also have important implications for curriculum construction. The extensive investigations by McKee (8), among others, of the words written by children of various ages promise to be of great value in the selection and the gradation of the contents of the spelling curriculum, if one assumes that children should be taught to spell the words which they are likely to use in their written work. Studies such as that by Fitzgerald (4) of the kinds of letters written by children of various ages and the purposes of their letters are of undoubted value in determining the ways in which instruction in composition can be adjusted to meet the needs of children. The study by Washburne and Vogel (12) also suggests that there are marked differences in the interests of children of different ages and that these interests should be carefully considered in organizing the courses of study in literature, science, and health.

These studies are typical of a number of investigations of the needs of children that have influenced the curriculum. The approach based on needs is quite different from the approach of the Committee of Seven, since it does not seek to determine the point at which a particular process or item *can* be taught. It clearly assumes that there is a developmental aspect of learning which must be considered and that a program based on the known needs and interests of individual children of different levels of development is an excellent way of assuring well-motivated, purposeful learning.

It should be pointed out that the studies of needs of children are fragmentary and limited to a small number of cases. The amount of this important kind of research should be greatly increased. The methods of stimulating and developing socially valuable interests should be carefully investigated.

The fact that a particular skill or topic or other item can be learned at a given level of development is not, in itself, a valid reason for teaching it at that level unless evidence shows at the same time that the item meets some vital need of the learner. Unless this position is maintained, it would be possible to clutter up the cur-

riculum with items that might be quite meaningless to the learner although they could be learned through routine drill motivated by extrinsic values. Undesirable rigidity and formalism might also result if the instruction were arbitrarily organized on a mental-age basis. This organization would not, of course, lead to effective learning. The ideal procedure would be to teach items in the curriculum at the time when they both meet some need of the learner and can be efficiently and easily learned. The extent to which this program can be carried out has not been studied at all adequately. It is quite possible that the emphasis in research relating to child development and the curriculum should be shifted from determination of the point at which particular skills, abilities, and processes *can* be taught, by the use of known methods and available materials, to consideration of the possibility of using new methods and materials adapted for teaching these aspects of learning at several age or developmental levels, so that they can be taught when they are needed by children to insure richer, fuller, safer living. The significance of this suggestion was recently demonstrated by the results of a study by Gates (6) in the field of primary reading which showed that, when methods and materials were carefully adapted to the developmental level of the individual learner, practically all pupils in the primary grades could be taught to read, including those with a mental age of only five years.

These three types of research—studies of readiness in reading and arithmetic; studies to determine the optimum points at which to teach a particular skill, process, topic, or other item of the curriculum; and studies to determine the needs and interests of children at various stages of development—illustrate concretely the relation between research in child development and the curriculum. The inadequacy and the narrow scope of these investigations have been pointed out, and new kinds of research that should be undertaken have been suggested. The need for further investigations along these lines is great.

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HOW THE METHOD OF SCORING A TEST IN DIVISION AFFECTS THE SCORE

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THERE are three ways to score a test in division when the divisor is a two-figure number. The scores derived by the use of these three methods may be designated as follows: (1) the correct estimation score, (2) the correct estimation and remainder score, and (3) the correct example score. In the first method the number of correct

estimations in an example constitutes the score. In the illustration the correct estimation score is 2. As the example has been solved, each quotient figure has been estimated correctly, although the correct quotient would be 45 and 3 remaining. If the same example is scored by the correct estimation and remainder method, the score is 1. The 4 of the quotient is correct, but the other quotient figure (7) and the remainder (31) are incorrect. In the third method of scoring, the correct example score is zero. The last method is the conventional way of scoring an example in division.

The first and the second methods of scoring a test in division were used by the writer in another investigation.¹ The first method should be used only in obtaining a score in a diagnostic test in division. This score should then be compared with the correct estimation and remainder score. From these comparative scores it can be seen whether a pupil's difficulty with the process results from errors of estimation of the quotient or from errors both of estimation and of multiplication and subtraction.

When scores are used for comparative purposes, the second or the third method of scoring should be used. The writer has used the

¹ Foster E. Grossnickle, "An Experiment with Two Methods of Estimation of the Quotient," *Elementary School Journal*, XXXVII (May, 1937), 668-77.

second method in reporting investigations in division when the divisor is either a two-figure¹ or a one-figure² number. Washburne³ assumed that the method used for scoring the test with a two-figure divisor gave results which are not comparable with those obtained from the conventional method of scoring. In order to determine whether this assumption is correct, the writer scored each of the final

TABLE 1
CORRELATIONS BETWEEN RESULTS ON TEST OF DIVISION WHEN
SCORED BY CORRECT ESTIMATION AND REMAINDER
METHOD AND BY CORRECT EXAMPLE METHOD

Grade	Number of Pupils	Correlation
Grade V		
One-figure divisor	102	$.920 \pm .0100$
Two-figure divisor	118	$.931 \pm .0083$
Grade VI:		
One-figure divisor	137	$.915 \pm .0108$
Two-figure divisor	112	$.946 \pm .0069$
Grade VII:		
One-figure divisor	105	$.967 \pm .0034$
Two-figure divisor	90	$.962 \pm .0038$
Grade VIII:		
One-figure divisor	105	$.944 \pm .0089$
Two-figure divisor	112	$.940 \pm .0073$

test papers from the 380 experimental subjects by the second and the third methods. According to the correct estimation and remainder score, there was a possible score of 39; according to the correct ex-

¹ *Loc cit.*

² Foster E. Grossnickle, "An Experiment with a One-Figure Divisor in Short and Long Division," *Elementary School Journal*, XXXIV (March and April, 1934), 496-506, 590-99.

³ "[Grossnickle's] data cannot be successfully compared with those of other experiments, and the extreme discrepancy between the results which he secured and those which Beall obtained, and again between Grossnickle's results and those of the Committee of Seven, as far as it appears from these superficial figures, might disappear were the methods of scoring comparable."—CARLETON WASHBURN, "A Reply to Brownell's Critique of the Committee of Seven Experiments," *Elementary School Journal*, XXXIX (February, 1939), 425

ample score, there was a possible score of 14. The correlation by the Pearson method between these two sets of scores was found to be $.945 \pm .0038$. The small probable error indicates the reliability of this correlation.

This same test and the test used in the experiment for short and long division (one-figure divisor) were given to approximately one hundred pupils in each grade from the fifth to the eighth, inclusive. Each test was scored by the two methods, and the results were correlated as before. The ratios thus obtained are given in Table 1. The high correlations, which are consistent for all grades both when the divisor is a one-figure and when it is a two-figure number, show that about the same relative score will be obtained by either method of scoring. Therefore it may be stated that either method of scoring is entirely satisfactory for securing group data.

The writer favors the method of scoring which gives a credit of one for each correct estimation and for the correct remainder. When this method is used, it is easier for both teacher and pupil to make a diagnosis of the cause of error in an example. In the illustration at the left the quotient is correct but the remainder should be 18 instead of 28. If the example is scored by the conventional method, the whole example is marked incorrect and the pupil has to start at the beginning to trace the error. If the remainder is marked incorrect, probably the cause of the error can be found in the final multiplication or subtraction. Hence, for instructional purposes the second method described in this article should be used.

The results from 380 experimental subjects were reported in mean scores. "The average correct score on Test 4 of this investigation was 38.21 out of a possible score of 39 (39.0-39.9)—a retention score of about 96 per cent."¹ Washburne has hopes that the damage which the evidence from the experimental study does to the recommendations of the Committee of Seven with regard to grade placement of division can be discounted because mean and not quartile scores

¹ Foster E. Grossnickle, "An Experiment with Two Methods of Estimation of the Quotient," *Elementary School Journal*, XXXVII (May, 1937), 676.

$$\begin{array}{r}
 257 \quad 28 \text{ (remainder)} \\
 36 \overline{)9270} \\
 \underline{72} \\
 207 \\
 \underline{180} \\
 270 \\
 \underline{252} \\
 28
 \end{array}$$

were given.¹ Since the mean accomplishment was about 96 per cent of a perfect score, it is evident that only a very small percentage of the group could possibly make a low score.

The Committee of Seven set a low standard of 80 per cent of perfection as satisfactory achievement. In the writer's experiment under consideration, only 3.2 per cent of the pupils whose records were complete (380) made a score below 80 per cent, and 295 pupils made perfect scores on the final test. A perfect score was 39 (statistically, a score from 39.0 to 39.9). The lower quartile score was 38.07; the mean score, 38.78; the upper quartile, 39.39. These results show that the achievement of the pupils used in the experiment in division was far in excess of the minimum goal of accomplishment set by the Committee of Seven.

In order to show that the achievement of this group was not dependent on the type of test used, the writer gave to these pupils Parts 5 and 6 of Test IV of the Compass Diagnostic Tests in Arithmetic. This standard test was chosen because it was also used in the investigation by Beall.² When the results of the experiment were reported in a former issue of the *Elementary School Journal*, the scores made on the Compass Diagnostic Tests were not given.

Part 5 of this test consists in estimating the first quotient figure when the divisor is a two-figure or a three-figure number. Part 6 consists in solving the complete example when the divisor is a two-figure or a three-figure number. The pupils in the experimental study had had no instruction in the use of a three-figure divisor. The results from these tests are given in Table 2. The norms for Parts 5 and 6 of Test IV of the Compass tests are given in Table 3. The only norms shown in the manual supplementing the test are expressed in grade equivalents. It is assumed that an average or a median is the correct score to compare with these norms.

¹ "Finally, scores are given in terms of mean achievement, whereas the Committee of Seven findings are in terms of lower quartile achievement—the mental age at which *three-fourths* or more of the children can achieve success.

² "This last point seems to have been completely overlooked by Brownell and also by Beall and Grossnickle. In every report on the Committee of Seven findings, emphasis has been placed on this standard—achievement of satisfactory results by *three-fourths* of the children."—CARLETON WASIMURNE, *op cit.*, p. 425

³ Ross H. Beall, "An Individual Instruction Unit in Long Division," p. 69 Unpublished Doctor's thesis, University of Iowa, 1932

From Tables 2 and 3 it is seen that the median scores on Parts 5 and 6 are equivalent to the norms for the low-sixth grade. These results show that division can be taught in Grade IV with at least 80 per cent retention for three-fourths of the group.

TABLE 2
SCORE MADE BY 380 FOURTH-GRADE PUPILS ON
PARTS 5 AND 6 OF TEST IV OF COMPASS
DIAGNOSTIC TESTS IN ARITHMETIC

	SCORE	
	Part 5	Part 6
Upper quartile	54 8	66 6
Mean	48 7	48 3
Lower quartile	40 0	30 0

TABLE 3
NORMS FOR PARTS 5 AND 6 OF TEST IV OF COMPASS
DIAGNOSTIC TESTS IN ARITHMETIC*

GRADE	SCORE		GRADE	SCORE	
	Part 5	Part 6		Part 5	Part 6
High fourth	35	28	High sixth	53	54
Low fifth	40	35	Low seventh . . .	55	58
High fifth	45	42	High seventh . . .	58	62
Low sixth	49	48	Low eighth	60	69

* G. M. Ruch, F. D. Knight, H. A. Greene, and J. W. Studebaker, *Manual of Directions for Compass Diagnostic Tests in Arithmetic*, p. 49. Chicago: Scott, Foresman & Co., 1925.

In conclusion, it may be stated that the conventional procedure, in which the example is marked either right or wrong, provides a satisfactory means of scoring a test in division for obtaining group data. For instructional purposes a more diagnostic form of scoring is needed. The writer recommends that a score of one be given for each correct estimation and a like score for a correct remainder. This method may also be used for group data.

Since these experimental data challenge the proposals of the Committee of Seven with regard to the grade placement of division, their recommendations should be considered tentative and should be revised in the light of past and future researches in this field.

AN EVALUATION OF CERTAIN STUDY PROCEDURES IN HISTORY

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THE research literature dealing with study habits reveals an interesting sequence of emphases. The first attack was directed on the physical conditions which affect study. The next emphasis was on the mechanics of the study period. This emphasis resulted in the wave of "supervised-study" plans which swept the country some years ago. Little or no attention had yet been placed on the actual techniques of study. The chief contribution of these earlier trends was to stimulate the interest of teachers in providing better conditions and general methods of work. Evaluations of various supervised-study plans in given situations revealed clearly that neither the supposed nor the claimed results were being achieved. This revelation led naturally to the third development in the field, namely, diagnosis of the causes of failure and attention to what pupils actually do when they study. Diagnosis and analysis of errors plus the development of study techniques to overcome these errors became the focus of attention. It was recognized that study and learning are one.

GENERAL CONCLUSIONS FROM EARLY RESEARCH ON STUDY PROCESSES

A large number of investigations of learning difficulties have been made. Not even the categories can be enumerated here. From the large number of problems investigated, the concern is, for the moment, with those which follow: Does knowledge of the rules for study (or learning) help pupils? Does knowledge about the specific techniques aid? Does actual practice in the use of these techniques improve the pupils' use of these procedures in their independent work? Do the pupils master these techniques better through discovering them or by being aided to see and to use them?

Since many summaries of investigation in supervised study are available, individual studies will not be reviewed here. The following general conclusions are of interest: (1) A combination of reading about, and discussion of, study methods plus direction through definite assignments is superior to the recitation procedure without definite study directions. (2) Definite practice in study procedures is superior to reading about, and discussion of, methods of study, though reading and discussing study rules is superior to completely undirected study. (3) Ability to carry on certain study procedures is specific as far as that study process is concerned, although there is transfer under certain methods of instruction.

THE PRESENT EXPERIMENT

Purpose.—The present investigation attempted to evaluate the effects of definite, detailed instruction in certain study processes in history, namely, (1) comparison, (2) identifying and expressing cause-and-effect relationships, (3) outlining, and (4) selecting and organizing subject matter. In addition to measuring the effects of instruction on the four designated techniques, the study also measured the results of this instruction on general subject achievement. Because of space limitations, only the data relative to training in comparison are presented. One summary table is included giving the final results for all four techniques.

Subjects and procedure.—The experiment was carried on in the Oak Avenue School, La Grange, Illinois, for a period of eighteen weeks. Two equated groups of eighth-grade pupils were used, thirty-seven constituting the experimental group and thirty-two the control group. No pupils were dropped from either group during the period of the investigation. Time used in testing is not included in the eighteen-week period, which was devoted exclusively to instruction. Materials used were identical for both groups and consisted of portions of the regular history textbook, of the history references in the library, of the regular textbook in reading, and of supplementary reading references. Both classes received instruction in all their subjects from the same teachers before and during the investigation. The sole difference was that in the experimental group four periods weekly of forty minutes each were devoted to instruction

and practice in the selected techniques of study. This work was given by Miss McKinnon after the technique had been planned with Mr. Burton.

The two groups were not on parallel assignments from day to day because to insist on such identity would have violated the normal learning processes of the groups as these developed. However, the total material covered, the general assignments, the facilities for instruction and practice were identical, with the exception of the experimental factor noted above. The control group spent the four forty-minute periods in undirected study.

Preliminary to the experiment both groups were given exercises, one for each of the four techniques under investigation. These results appear in the tables under the heading "Original Test." At the end of the eighteen-week period the same material was given again to both groups, and the results were tabulated under the heading "Final Test." During the experimental period test exercises were given at the end of every third week, six in all. In addition, many teaching exercises were given. General achievement was tested at the beginning and at the end through use of the New Stanford Achievement Test, Forms V and W.

The teaching of the process of comparison.—The first step was to determine what to teach. Analysis of the process of comparison yielded the following objectives: (1) ability to discover basis for comparison, if there be comparable facts or data; (2) ability to select the distinguishing characteristics present;¹ (3) ability to classify the distinguishing characteristics present; (4) ability to list likenesses; (5) ability to list differences; and (6) ability to formulate a summarizing statement. Each of these abilities was made the aim of definite instruction in conjunction with the regular work in history and reading. The general technique used was first tried on a similar group and was found to be suited to the level of maturity involved. It is, of course, quite impossible to reproduce here the details of the daily lessons. The following outlines and sample exercises will, however, give some insight into the procedure. The results of previous research led to avoidance of the error of confining instruction

¹ The second objective is, for practical purposes, a part of the third objective. Hence data on the second objective do not appear in the tables.

to description and discussion—verbal exhortation—of study processes. The major emphasis was placed on actually experiencing the processes, on self-directed scrutiny of errors, and on co-operative formulation of summary description of what had been learned.

The following outline was used by the teacher and was later given to the pupils as a guide sheet.

A. What a comparison is.

1. A comparison is a statement of the ways in which two objects or things are alike and of the ways in which they differ.

B. Steps in a comparison.

1. The first step in comparing two objects or items is to determine the kinds of characteristics of the two things to be compared. We have called this *selecting the basis for comparison*. Examples: Two houses: size, shape, color, material, etc. Two dresses: color, material, cost, etc.
 - a) Read through the material first. Keep this question in mind as you read: What are the distinguishing characteristics which are being mentioned? Use these characteristics as a preliminary basis before starting to search for the facts.
 - b) Re-read the material and verify your selection of the basis for comparison.
2. The second step in the making of a comparison is the arrangement and classification of facts.
 - a) Read the facts concerning one of the things and list the kinds of facts presented, that is, descriptive terms referring to the general characteristics previously selected.
 - b) Read the facts concerning the other item and then check with the list made in (a). This will indicate the characteristics of both items concerning which you have facts.
3. The third step is the making of a table which simplifies the arrangement of data secured in the second step. Various arrangements of these tables are possible depending on what categories one wishes to emphasize.

	Hair	Eyes	Bows	Dress	Shoes	Watch
Jane						
Mary						

4. The fourth step: make a list of the likenesses.
5. The fifth step: make a list of the differences
6. The sixth step: make a summary statement of important points

The foregoing formal outline might give the impression that the techniques of comparison were handed out to the pupils. It is to be recalled that this outline is a skeletonized summary of the steps to be covered by the teacher. All the points were developed by the pupils from their own reactions. The outline was not given to them as a guide until they had practically approximated it through their own developments.

Sample exercises in which the six steps were developed are:

Write a comparison of the American and British armies and navies at the time of the Revolution. Gordy, *History of the United States*, p. 225.

Write a complete comparison of the English and Spanish colonies in the New World. Gordy, *History of the United States*, pp. 32, 38.

Write a comparison of life in the New England colonies and life in the Southern colonies. Gordy, *History of the United States*, pp. 102-8, 109-12.

Write a comparison of the policies of the Republican and Democratic parties from 1865 to 1914.

Results of teaching pupils to compare.—Typical errors appeared. Making a definite summary presented the most difficulty, while stating differences offered the least. Selecting a basis for comparison was relatively easy when descriptive terms were available, but this step became more difficult when the material included more general categories. Statements of likenesses were often omitted during the early training period; pupils seemed to believe that only differences are needed in making comparisons. This same tendency is evident in the typical conversational procedure of the layman in making comparison. Instruction was modified to give aid as errors appeared. The results may be presented in simple tabular form.

Table 1 shows steady progress in elimination of errors and in facility in making comparisons. Since the control group made no progress with the more difficult items, a need for instruction would seem to be indicated. This group made its best growth with the easiest item, namely, statement of differences. The experimental group made slow progress at first but accelerated as instruction proceeded. The cumulative effect of instruction, often accompanied by slow growth at first, has been shown in many other experiments for certain types of learning.

Table 2 summarizes the growth of both groups by contrasting scores in the original and the final tests.

Table 3 gives a picture of the nature of growth for the experimental group during the first part of the teaching period. Study of

TABLE 1
PERCENTAGES OF PUPILS IN EXPERIMENTAL AND CONTROL GROUPS
MAKING ERRORS DURING PERIOD OF TRAINING IN CON-
SECUTIVE TEST EXERCISES IN COMPARISON

ERROR	TEST 1 (AFTER THREE WEEKS)		TEST 2 (AFTER SIX WEEKS)		TEST 4 (AFTER TWELVE WEEKS)	
	Experi- mental Group	Control Group	Experi- mental Group	Control Group	Experi- mental Group	Control Group
Failure to select basis . . .	78.4	100 0	78 4	100.0	45 9	100 0
Failure to classify data . .	78.4	100 0	78 4	100.0	48 6	100 0
Failure to state likenesses	67 6	96.9	70.3	90 6	54.1	81.3
Failure to state differences	62.2	84 4	64 9	71 9	43.2	62 5
Failure to make definite summary.	86.5	100 0	86 5	100 0	54.1	100 0
Mean percentage. . .	74 6	96 3	75 7	92 5	49.2	88 8

TABLE 2
PERCENTAGES OF PUPILS IN EXPERIMENTAL AND CONTROL GROUPS
MAKING ERRORS IN ORIGINAL AND FINAL TESTS
IN TECHNIQUE OF COMPARISON

ERROR	EXPERIMENTAL GROUP			CONTROL GROUP		
	Original Test	Final Test	Gain	Original Test	Final Test	Gain
Failure to select basis . .	100.0	40.5	59 5	100 0	100 0	0 0
Failure to classify data . .	100 0	45 9	54 1	100 0	100 0	0 0
Failure to state likenesses.	97.3	45 9	51.4	96 9	75.0	21 9
Failure to state differences	91.9	40.5	51.4	84 4	62 5	21.9
Failure to make definite summary	100.0	51.4	48.6	100.0	100 0	0 0
Mean percentage.	97 8	44 8	53.0	96.3	87 5	8.8

a record of this type during either experimental or ordinary teaching indicates points of attack in reteaching. The marked growth between the fifth teaching exercise, which came toward the end of the

first month, and the final test after eighteen weeks would seem to result from the constantly modified instruction.

The critical ratios, not given here, indicated that all group differences and differences between original and final scores were highly significant.

TABLE 3
PERCENTAGES OF PUPILS IN EXPERIMENTAL GROUP MAKING
ERRORS THROUGH PERIOD OF TRAINING IN THE
TECHNIQUE OF COMPARISON

Error	ORIGINAL TEST	TEACHING EXERCISE					FINAL TEST AFTER EIGHTEEN WEEKS
		I	II	III	IV	V	
Failure to select basis . .	100 0	91 9	80 2	89 2	86 5	78 4	40 5
Failure to classify data . .	100 0	91 9	89 2	89 2	86 5	73 0	45 9
Failure to state likenesses	97 3	97 3	83 8	78 4	73 0	67 6	45 9
Failure to state differences	91 9	64 9	62 2	62 2	64 9	62 2	40 5
Failure to make definite summary	100 0	97 3	91 9	91 9	80 2	86 5	51 4
Mean percentage...	97 8	88 7	83 3	82 2	80 0	73 5	44 8

TABLE 4
MEAN OF PERCENTAGES OF PUPILS IN EXPERIMENTAL AND CONTROL
GROUPS MAKING ERRORS IN ORIGINAL AND FINAL TESTS
OF FOUR STUDY PROCEDURES IN HISTORY

STUDY PROCEDURE	EXPERIMENTAL GROUP			CONTROL GROUP		
	Original Test	Final Test	Gain	Original Test	Final Test	Gain
Comparison	97 8	44 8	53 0	96 3	87 5	8 8
Sensing cause and effect	52 2	14 9	37 3	49 7	41 9	7 8
Outlining	70 9	23 5	47 4	66 4	49 0	17 4
Selecting and organizing material	66 5	20 0	46 5	63 7	54 8	8 9

Results of teaching in other techniques.—Table 4 is included to show that gains in the other items under investigation were as significant as the gains made in the technique of comparison.

SPECIAL NOTE ON TRANSFER

Evidence of transfer was derived directly and indirectly throughout the study, but space permits only a brief reference. Three teachers of English and science reported definite improvement in the detailed and accurate comprehension of the meaning of what was read, a more orderly organization of the ideas secured through reading, and a greater freedom of expression. An honest, critical examination of pupils' papers in various subjects reveals, for the pupils in the experimental group, marked improvement in sentence construction, in sequence of ideas, in selection of materials relevant to the problem, and in exactness of statement of facts. The scores on the two forms of the Stanford Achievement Test taken before and after the experiment show the experimental group to have gained twenty-six points in reading and twenty-four in history, while the control group gained eighteen in reading and ten in history. There was also evidence that the training in the first three study habits had a marked effect on rapid mastery of the fourth and more difficult process of selecting and organizing material.

The last statement is significant in support of the seventh conclusion given below, which does not seem to be borne out by Table 4. Selection and organization of material is, upon analysis, more difficult than any of the other three processes. Greater insight, better judgment, and more maturity are necessary. The pupils indicated recognition of the increased difficulty but nevertheless made rapid gains. These gains seem clearly results of the training in the other three study processes, each of which is inherent in the fourth and more complex process. This effect could not, of course, be eliminated, and it could not be measured.

CONCLUSIONS

Based on data similar to the foregoing and on all four techniques mentioned, the following conclusions seemed justified: (1) Definite detailed instruction in the designated techniques of study in history definitely improved the pupils' ability to use those techniques, as well as their ability to use the subprocesses. (2) In the case of factors and subprocesses which are mechanical in nature, the effect of corrective exercises appears earlier and mastery is more complete than

in the case of factors which involve thought content. (3) Instruction in three of the study techniques, namely, sensing cause-and-effect relationships, outlining, and selecting and organizing materials, had a beneficial effect on ability to make comparisons. The first three focus attention on subprocesses which are important in comparison. (4) Ability to outline varies in proportion to the number and the kinds of mechanical aids which are supplied by the material, namely, paragraph and topical heads, marginal comments, table of contents, etc. (5) Mechanics of outlining can approach mastery with children of eighth-grade level. (6) Increased ability in outlining in history contributes to increased ability in outlining in other subjects. (7) Selection and organization of material on a given problem presents greater difficulty (for eighth-grade pupils) than does the objective representation of an author's thought relationships, as, for instance, in outlining. (8) The trial-and-error method of procedure in the various types of mental activity required in study procedures is wasteful of the pupils' time. (9) Exercises requiring an evaluation of material, such as discrimination between major and minor points, offer difficulty to eighth-grade pupils. (10) The number of errors in a given exercise varies directly in proportion to the length and the complexity of the exercise.

FURTHER INVESTIGATION SUGGESTED

The following problems are suggested for further investigation: (1) How close could mastery, or nearly perfect facility, be approached in given study procedures? What additional instruction and practice would be necessary? (2) What are the specific difficulties present in the inability of pupils to cope with problems of sentence structure? (3) How many items may be included within the span of attention of pupils of given levels? That is, how long and how complex may exercises be at given levels? (4) What factors, if any, other than inability to comprehend are present in the omission of major and minor points? (5) What further transfer might be expected with the improvement of still other study techniques? (6) How would the use of carefully weighted materials and exercises affect the findings on a given study technique?

SELECTED REFERENCES ON PUBLIC- SCHOOL ADMINISTRATION. I

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THE references on public-school administration herewith presented have been selected on the basis of current interest, content, and practical value. The list is necessarily restricted because of limitations of space. As a result some meritorious contributions have had to be omitted.

In this article appear titles under (1) general administration, (2) state school administration, (3) city school administration, and (4) supervision. Titles classified under (5) teaching staff, (6) school finance, (7) business management, and (8) public relations will be published in the February number of this journal.

GENERAL ADMINISTRATION

1. ASHBY, LYLE W. "Education for American Life," *Journal of the National Education Association*, XXVIII (February, 1939), 53.

Summarizes some of the findings and recommendations concerning the educational program which were put forward by the Regents' Inquiry into the Character and Cost of Public Education in the State of New York

2. BARKER, CHARLES MONROE. "Why Fear Federal Aid?" *Nation's Schools*, XXIII (January, 1939), 25-26.

Challenges the soundness of using the argument of "loss of local autonomy" against federal supervision of federal funds and argues that, with federal aid properly administered, losses in local authority would be offset by educational gains to the children.

3. CHAMBERS, M. M. "Federal Aid without Control," *Nation's Schools*, XXIII (February, 1939), 53-54.

Contents that provisions and declaratory clauses of the current bill providing federal aid may be so construed as to maintain local and state initiative and responsibility in the conduct of public education.

4. EDUCATIONAL POLICIES COMMISSION. *Federal Activities in Education*. Washington: Educational Policies Commission of the National Education As-

sociation and the American Association of School Administrators, 1939. Pp. viii+152.

A historical and descriptive account of assistance given by the federal government to the states for educational purposes and of direct activities of the federal government in education.

5. EDWARDS, NEWTON. "Educational Problems of a Changing Population," *Elementary School Journal*, XXXIX (May, 1939), 664-77.

The author asserts that the inequalities of educational opportunity existing in America call for a rethinking of our national educational policy, with consideration for the effects of internal migration, differentials in reproduction, and imbalance in the burden of child care and education.

6. HALL, SIDNEY B. "Relation of Administration to Instruction," *School and Society*, XLIX (March 18, 1939), 330-34.

Develops the point of view that democratic school administration must recognize the principle of teacher growth and participation in an effective instructional program, as well as the principle of pupil development.

7. HALL, SIDNEY B. "The Successful Administrator," *Nation's Schools*, XXIII (March, 1939), 45-46.

Discusses the development of administration out of the problems of instruction, its phase of mechanization borrowed from industry, and its responsibility today as the servant of instruction in providing the kind of program and environment conducive to pupil and teacher growth.

8. HAMON, RAY L. "Functional Planning of the Small-School Plant," *School Executive*, LVIII (April, 1939), 14-17.

A discussion of floor plans and minimum essentials for rural, one-story, elementary-school and high-school buildings organized on the 6-6 plan. Various school functions and community use are considered. Includes a sample plan for the elementary school and sample layouts for multiple use in the high school.

9. LINDER, IVAN H. "Neglected Areas of School Administration," *American School Board Journal*, XCVIII (April, 1939), 50-51.

Describes a questionnaire-interview method of surveying faculty reactions to the functioning of the high-school program in Palo Alto, California. Advocates the procedure as a possible way of developing proper teacher-administrator and community-school relationships.

10. NUTTALL, L. JOHN. "Education Produces Wealth," *Nation's Schools*, XXIII (March, 1939), 47-48.

Asserts that public education assists in the production of wealth by its share in maintaining the general welfare, by contributions from widespread study of science, and by its contribution to a "higher level of culture."

11. OBERHOLTZER, KENNETH E. "Administration, Servant to Learning," *School Executive*, LVIII (April, 1939), 29-30.

Classifies subjective responses of teachers, principals, and superintendents, on the question of how administration contributes to learning.

12. OTTO, HENRY J. "Something New and Different," *School Executive*, LVIII (June, 1939), 21-22.
A report on how 156 teachers in 25 elementary schools of Michigan are meeting administrative problems arising from innovations in classroom teaching.
13. QUINLIVAN, THEODORE V. "Changing Functions of Local School Boards," *American School Board Journal*, XCVIII (April, 1939), 19-21.
Points out significant transitions in public-school administration, from early practices to present developments, with respect to administrative control, selection and size of boards, fiscal control, and differentiation of legislative and executive functions.
14. REEDER, WARD G. "What Controls, if Any, Should Follow Federal Subsidies to Public Education?" *School and Society*, L (July 8, 1939), 50-52.
Advocates controls to safeguard against the pauperization of the states and the waste of school funds.
15. "The School's Social Service Relationships," *Journal of the National Education Association*, XXVIII (May, 1939), 149.
Summarizes the points of emphasis of the Educational Policies Commission on the relations of public education to other social services.
16. SWIFT, FLETCHER HARPER. "National Aid Is Imperative," *Nation's Schools*, XXIII (March, 1939), 57-58.
Points out the need for federal aid to education and compares the significant features of the English and the French systems of national support of education with the American plan.

STATE SCHOOL ADMINISTRATION¹

17. CHAMBERS, M. M. "Educational Qualifications for School Board Members," *Nation's Schools*, XXII (December, 1938), 33-34.
Reviews certain judicial decisions in Kentucky resulting in removal of unqualified county school board members.
18. COCKING, WALTER D., and GILMORE, CHARLES H. *Organization and Administration of Public Education*. Advisory Committee on Education, Staff Study No. 2. Washington: Government Printing Office, 1938. Pp. x+184.
The major purpose of this study was to determine the character of the organization and to evaluate the effectiveness of the administration of public education in the various states and local school units.
19. FLETCHER, B. A. *The Next Step in Canadian Education*. Studies of the Institute of Public Affairs at Dalhousie University. Toronto, Canada: Macmillan Co. of Canada, Ltd., 1939. Pp. xvi+202.

¹ See also Item 729 in the list of selected references appearing in the December, 1939, number of the *Elementary School Journal*.

A portrayal of inequalities of educational opportunities in Canada. Condemns the small section (district) system and summarizes progress toward reorganization.

20. FROST, NORMAN. "What Size School System?" *Nation's Schools*, XXIII (February, 1939), 57-58.

The author contends that, if local school systems are to maintain control of local schools, the administrative units must be effective and economical.

21. HALL, EARL R. *Administrative Unit for Illinois*. New York: Available at Teachers College, Columbia University, 1939. Pp. 186.

Shows how the state of Illinois might reorganize its more than twelve thousand local school districts into larger units of administration and thereby obtain more and better education for the money expended.

22. HOLY, THOMAS C. "School Bond Issues as Related to the Ohio Study of Local School Units," *Educational Research Bulletin*, XVIII (January, 1939), 6-8.

Summarizes the expenditure of 385 school bond issues in Ohio for 1937 and 1938 as related to the recommendations prepared by the Study of Local School Units.

23. HUTCHINS, C. D. *Administration of Pupil Transportation*. Bulletin No. 2. Columbus, Ohio: State Department of Education, 1938 (revised). Pp. 100.

Explains the legal basis of pupil transportation; describes acceptable standards of equipment and service; and presents data pertaining to costs, records, and reports for such service in the schools of Ohio.

24. KINDRED, L. W. "More Legal Problems of Nonpublic School Support," *Nation's Schools*, XXIII (January, 1939), 59-60.

Continues previous discussions of legal restrictions on the use of public funds for nonpublic schools. Consideration is given to forms of indirect aid to private and parochial schools.

25. LOWERY, MILLARD L. "County School Administration," *The Seventh Yearbook of School Law*, pp. 75-79. Edited by M. M. Chambers. Washington: American Council on Education, 1939.

The chief topics covered in this chapter are the eligibility and removal of county boards of education, judicial definitions of the powers of the board, and litigation concerning the office of county superintendent of schools.

26. MEECE, LEONARD E., and SEAY, MAURICE F. *Financing Public Elementary and Secondary Education in Kentucky*. Bulletin of the Bureau of School Service, College of Education, University of Kentucky, Vol. XII, No. 1. Lexington, Kentucky: University of Kentucky, 1939. Pp. 182.

A graphic and descriptive account of variation among counties and regions in ability to support education. Recommendations of the authors, which have been approved by the Kentucky Education Association, are presented.

27. MORPHET, EDGAR L. "State Studies of Local School Units as Related to the School Plant," *Review of Educational Research*, VIII (October, 1938), 432-42.
A review of studies made through state departments of education in recent years concerning the school-plant facilities in relation to the adequacy of administrative units. Includes summaries of the findings from studies in certain states.
28. RELLER, THEODORE L. "A State Program for the Training of Superintendents of Schools," *American School Board Journal*, XCVIII (May, 1939), 23-25, 106.
Advocates a state program for the training of school administrators jointly by a university, the state department of education, and selected city superintendents. Suggests a state grant to a university for carrying out the program and a three-year period of training for the student, including an internship under a superintendent who would be made a member of the faculty.
29. *Special Opportunities of Small Rural Schools*. Bulletin 230. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 98.
Notes the possibilities inherent in most small rural schools and explains the contribution that the teacher may make in developing these opportunities.
30. *Tenure of School Administrators*. Washington: Committee on Tenure of the National Education Association, 1939. Pp. 24.
A report of a survey of tenure laws and of the method of selection and the length of time in one position for county superintendents, city superintendents, and principals in the various states. The data indicate that tenure of school administrators is affected by differences in tenure laws and by size of district.
31. VILES, N. E. "State Supervision of School-Plant Planning," *School Executive*, LVIII (August, 1939), 21.
Discusses the obligation of the state to maintain suitable schoolhouse facilities. Points out the value of state financial and supervisory assistance to local districts in need of long-range planning.

CITY SCHOOL ADMINISTRATION

32. BETTS, EMMETT A. "Reorganization of the Elementary School To Meet the Needs of Children," *National Elementary Principal*, XVIII (April, 1939), 159-65.
Emphasizes a reorganization of thinking that will permit identification and intelligent care of pupil needs.
33. DANNELLY, CLARENCE M. "Current Trends in School Administration," *School Executive*, LVIII (February, 1939), 7-8, 48.
Discusses the emergence of a technique of school administration through definite changes in procedures of solving problems. Pleads for careful, systematic training of superintendents and for adequate preparation for leadership.

34. EVERLY, ROBERT F., and MCFADZEAN, JOHN "When Park and School Systems Work Together," *Nation's Schools*, XXIV (September, 1939), 22-25.
Describes a successful experiment in Glencoe, Illinois, where adjoining park and school plots have been planned and developed as units for both school and community use.
35. HENRY, NELSON B. "City Government and Schools," *Nation's Schools*, XXII (November, 1938), 35-36.
Reviews the arguments advanced by proponents of independent control of city school systems and cites evidence to warrant the conclusion that co-ordination of school and municipal services is justified by experience.
36. HUBBARD, FRANK W. "Salaries—Eight Years Later," *Journal of the National Education Association*, XXVIII (May, 1939), 147-48.
Presents data pertaining to salary trends for all classes of city school employees from 1930-31 to 1938-39.
37. MOORE, CLARENCE CARL. "Superintendent Studies the Problems of Educational Administration," *Educational Administration and Supervision*, XXIV (November, 1938), 625-31.
Points out the value of professional study in educational administration through the curriculums offered by graduate schools as opposed to trial-and-error procedure.
38. MULLER, EDGAR E. "Who Should Determine Budgets?" *Nation's Schools*, XXIV (October, 1939), 56.
Maintains that independent boards of education should be allowed to determine school budgets and gives five reasons for this conclusion.
39. REAVIS, WILLIAM C. (editor). *Democratic Practices in School Administration*. Proceedings of the Eighth Annual Conference for Administrative Officers of Public and Private Schools, 1939. Chicago: University of Chicago Press, 1939. Pp. x+214.
A series of papers setting forth the philosophy and the problems of democratic participation in school administration and discussing the training of personnel for effective participation in the solution of administrative problems, the organization of school systems on the democratic basis, the importance of applied democratic practices in the instruction and management of pupils, and examples of the actual use of democratic procedures in the administration of city school systems.
40. REAVIS, WILLIAM C. "The Need for a Sociological Basis in City School Administration," *Journal of Educational Sociology*, XII (May, 1939), 534-40.
Shows the need for a background of sociological knowledge in solving modern problems in city school administration. Draws on the experiences of John W. Withers while superintendent of schools in St. Louis, Missouri, to illustrate the issues discussed.

41. REINOEHL, C. M. "Teacher Participation in School Administration," *National Elementary Principal*, XVIII (December, 1938), 69-74.

Points out that teachers have been found a real source of information and help in school administration and shows that the trend appears to be toward the greater utilization of teacher participation in improving school conditions.

42. RELLER, THEODORE L. "Improvement in the Status of the Local Superintendent of Schools," *American School Board Journal*, XCIX (August, 1939), 19-21.

Discusses conditions for establishing necessary developments in efficient local administration. In general these deal with adequacy of the unit, duties of the board, the responsibilities and qualifications of the superintendent, and freedom from the spoils system.

43. SPINNING, JAMES M. "Administration without Portfolio," *Nation's Schools*, XXII (November, 1938), 26-28.

Describes plans of teacher participation in school administration practiced in a number of city school systems.

44. *Standards for Superintendents of Schools*. Preliminary Report of the Committee on Certification of Superintendents of Schools. Washington: American Association of School Administrators, 1939. Pp. 64.

A summary of current standards and qualifications for the city superintendency. Submits tentative recommendations for establishing desirable qualifications for admission to the profession.

45. STRAYER, GEORGE D. "Changing Conceptions of Educational Administration," *Teachers College Record*, XL (March, 1939), 469-82.

Shows the large contribution that the growth of internal affairs in the public schools made to the development of the superintendent as a professional executive and statesman.

46. VIEG, JOHN ALBERT. *The Government of Education in Metropolitan Chicago*. Chicago: University of Chicago Press, 1939. Pp. xviii+274.

Describes basic educational and governmental problems that have emerged in the complex urban area centering in Chicago. Much consideration is given to the inequality of educational opportunities between the central corporate city and its environs. Recommendations are proposed for a better adjustment between schools and cities in this area.

47. ZYVE, CLAIRE T. "Democratic Living—A Program for Schools," *National Elementary Principal*, XVIII (April, 1939), 152-58.

Urges co-operation of pupils, teachers, principals, and parents to secure most intelligent consideration of school problems and policies.

SUPERVISION¹

48. DEAN, RAY B. "Modern Psychology and School Supervision," *Educational Administration and Supervision*, XXV (January, 1939), 18-24.
Points out the implications for supervision of the behavioristic psychology and the Gestalt or organismic psychology.
49. FROST, NORMAN. "Supervisory Techniques," *Virginia Journal of Education*, XXXII (May, 1939), 347-49.
Lists supervisory techniques and offers nine suggestions on how to select and use them in any specific case.
50. GREER, H. L. "Supervision in Small Schools," *American School Board Journal*, XCIX (September, 1939), 52-53, 97.
In the small system supervision is the superintendent's responsibility; it starts with the first contact with a new teacher and is accomplished in several ways.
51. HEFFERNAN, HELEN, and BURTON, WILLIAM H. "Adjusting Theory and Practice in Supervision," *Educational Method*, XVIII (April, 1939), 323-28.
A discussion of four "typical persistent problems" in the field of supervision with digests of recommended and generally accepted answers or solutions to these problems.
52. HOSIC, JAMES F. "The Case for Supervision," *Educational Method*, XVIII (April, 1939), 329-35.
An address stressing newer concepts of the function and the necessity of supervision.
53. IRWIN, MANLEY E. "Supervision," *Review of Educational Research*, IX (June, 1939), 303-11.
Interpretative review of published reports of research in the field of supervision during the three-year period ending January, 1939.
54. LAMBRIGHT, E. PAULINE. "My Need for Supervision," *Educational Method*, XIX (October, 1939), 25-27.
A statement of the need felt by a well-trained, experienced teacher for guidance and inspiration through supervision.
55. LERKOWITZ, ABRAHAM. "Supervision in Education," *Proceedings of the National Education Association*, LXXVI (1938), 414-16.
A plea for creative or democratic supervision as opposed to the arbitrary, undemocratic type. The author believes that good teachers are made through supervision which utilizes school and community resources to the fullest extent.

¹ See also Items 467 (Calvert) and 473 (Myers and Kifer) in the list of selected references appearing in the September, 1939, number of the *Elementary School Journal* and Item 42 (Hughes) in the January, 1940, number of the *School Review*.

56. NEUBAUER, DOROTHY. "Curriculum Approach to Supervision," *Curriculum Journal*, X (March, 1939), 132-33.

Supervision in curriculum-making comes from all workers on the problem, benefits all, and results in an improved curriculum.

57. RICE, D F R. "Teachers Appreciate Nontechnical Supervision," *American School Board Journal*, XCVIII (June, 1939), 21-23.

Asserts that the scientific evaluation of the teaching process is inadequate for the measurement of some qualities which make up good teaching. Cites the satisfactory results obtained by one supervisor through informal and non-technical note-writing after each visitation.

58. SHANNON, J. R. "The Role of General Supervisors and of Special Supervisors in the Improvement of Teachers in Service," *Educational Administration and Supervision*, XXV (April, 1939), 287-94.

Discusses supervision as a service to teachers, the supervision requested by teachers, teacher self-improvement (self-analysis sheets), and teacher participation in curriculum revision.

59. SHANNON, J. R. "Supervisory Policies and Teachers' Reactions," *American School Board Journal*, XCVIII (May, 1939), 37-38.

Discusses policies of supervisors as service agents to teachers. Asserts that supervision should be scientific and democratic, should recognize the individuality of teachers, should attempt to improve poor teachers, and should consider the child as the center of interest.

Educational Writings

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REVIEWS AND BOOK NOTES

A HELPFUL BOOK ON READING FOR TEACHERS, ADMINISTRATORS, AND PROFESSIONAL STUDENTS.—All persons interested in reading should be sure to examine a volume of 366 pages which has been published in the Supplementary Educational Monograph series of the University of Chicago under the title *Recent Trends in Reading*,¹ compiled and edited by William S. Gray. The volume presents the forty-four papers delivered at the reading conference held at the University of Chicago in June, 1939. The scope of the field covered is indicated by the large divisions of the monograph: "Part I. Reading in General Education" (three papers); "Part II. Current Issues and Trends Relating to Basic Instruction in Reading" (ten papers); "Part III. Special Problems Relating to Poor Readers" (twelve papers); "Part IV. The Improvement of Reading in Various School Subjects" (twelve papers); "Part V. The Cultivation of Reading Interests and Tastes" (five papers); "Part VI. The Library as an Aid to Learning" (two papers); and "Part VII. Summary of the Conference."

The treatment of the many topics is authoritative because of the experience and the high standing of the group of authors. At the same time there is, throughout, the calm and scientific approach which has come to preclude discussion of the many problems involved in reading instruction. A detailed index enables one to use this mass of material as a source of reference on particular problems.

The title, *Recent Trends in Reading*, is explained by Gray in part of his summary by pointing out (1) that we have now a broader conception of reading, which gives more and more place to a reader's reactions, (2) that growth in reading is a continuous process from Grade I through college; and (3) that reading has assumed a more and more vital relation to the entire curriculum. He then points out the recent emphases on reading readiness, the retention of reading as a subject, the attention given to development of meaningful concepts, the relation between reading and language, and the importance of purpose in reading. Other outstanding modern trends are provisions for poor readers, reading guidance in the content fields, the cultivation of reading interests and tastes, and attention to library problems and needs.

¹ *Recent Trends in Reading*. Proceedings of the Conference on Reading Held at the University of Chicago, Vol. I. Compiled and edited by William S. Gray. Supplementary Educational Monographs, No. 49. Chicago: Department of Education, University of Chicago, 1939. Pp. x+366. \$2.00.

It would be futile to seek to comment in detail on such a large group of expressions from such a large number of persons. Naturally some contributions are more vital than others; there is the tendency toward wordiness that is evident when papers are prepared for the ear rather than the eye and when authors work independently of one another; but the ability and the professional caliber of the authors make the whole well worth reading. At the same time the Table of Contents and the Index permit a reader to use the part of the publication in which he is immediately interested. The volume distinctly justifies its title, *Recent Trends in Reading*.

E. W. DOLCH

University of Illinois

SCHOOL TRANSPORTATION APPROACHES SOCIAL ENGINEERING.—One of the most comprehensive views that have been taken of school transportation is shown by Lambert,¹ who is serving public education in a state, Utah, that for decades has accepted busses, bus drivers, and transportation costs as integral parts of the school program. Such a background helps explain why he should state:

When used judiciously, transportation of pupils is an important instrument for educational and social reconstruction. The social, cultural, and occupational horizons of many pupils, especially those in junior and senior high schools, are changed significantly by their experiences in large schools. . . . Graduates of the centralized schools bring new social yeast into the old home village [p. 3].

The author achieves certain objectives especially well. Among these are the following:

1. He shows that no fixed rule can be set down for the establishment of bus routes but that each administrator must consider such variables as maximum walking distance decided upon, dominant patterns of lines of travel, capacity of vehicles, and the time factor. Specific and exceedingly helpful recommendations are made for the utilization of these factors by administrators who are seeking to develop the best plan of transportation in a given situation.

2. A broad overview is given of the obligations of the state with regard to financial support, supervision, standards of operation, and stimulation of desirable transportation practices.

3. Clearly demonstrated is the fallacy of placing major dependence on population density as a criterion for determining the amount of transportation that a district should provide and hence the financial aid for transportation that should be extended to a district by the state. The relatively greater advisability of taking into account the factors of time and distance is then indicated.

It is inevitable that a study which is so comprehensive should reveal certain omissions. To the reviewer the most serious is the failure to investigate care-

¹ Asael C. Lambert, *School Transportation*. Stanford University, California. Stanford University Press, 1938. Pp. xiv+124. \$3.00.

fully the health factor, although the significance of this factor is skirted a number of times. For example, the statement is made that "it is fundamentally impracticable and undesirable to advance by even as short a time as thirty minutes the hour at which most of these first pupils now enter these seven busses. The practicable limit of this point of time in the morning appears to have been approached in this district—about 7:30 A.M." (pp. 104-5). Nevertheless, nothing comfortably authentic is suggested as a guide to the administrator. Many parents, educators, and physicians would contend that a serious strain is placed on a child of six to eight years who must be roused in time to dress, to eat, and to walk some distance and meet a 7:30 bus, especially so when he is jostled and prodded into activity through a bewildering day that has no break until he returns, often weary-eyed and weary-bodied, to his home at five o'clock in the evening. What are the facts? Can the school itself counteract this unwholesome situation, or should bus travel for young children be reduced, to a much greater degree than Lambert suggests, by continued dependence on neighborhood schools and, in cases of serious isolation, by the use of correspondence education?

The author does not fall into the error, so common in recent years, of assuming that it is so much easier to make a large school a good school than it is to improve a small school that enlarging the attendance area is worth almost any amount of expense, pupil time, and even weakening of small-community life. At least he goes so far as to state:

The experience of veteran and successful administrators of centralized school systems indicates that it is by no means true that every small school should be abandoned or disrupted. It has been demonstrated many times that an intelligent handling of the salary schedule and the supply budget will put and keep high-grade teachers and a splendid educational program in the smaller elementary schools and in relatively isolated villages. It is clear, therefore, that before any small school is disrupted or moved, over protest, exhaustive study of the educational, social, religious, psychological, and economic factors involved must be made [p. 20].

Lambert's *School Transportation*, then, has a dollar-and-cents value to the administrator who is transporting pupils or who is planning to do so. Perhaps a greater value of the book, though, grows out of the fact that its author seeks to maintain an attitude of educational statesmanship and not to permit his high degree of interest in the subject to blind him to other important considerations in the education of boys and girls.

KNUTE O. BROADY

University of Nebraska

AN ELEMENTARY COURSE IN GENERAL MATHEMATICS.—For a great many years high schools here and there have been experimenting with courses in general mathematics. Usually these courses have represented efforts to organize into one program some of the more advanced topics in arithmetic and the easier and more useful portions of algebra and plane geometry. It was thought

that elementary mathematics would be more meaningful and more useful if so presented and that the pupil who would study mathematics for only one year in high school would derive more benefit from general mathematics than from any other type of course organization.

In the book under review¹ the authors recognize that "today we live in a mathematical world" (p. v) and that the pupil, if he is to find and to keep his place in that world, must attain skill in the basic processes and the ability to think clearly in quantitative situations. They present a series of topics which are of unquestioned social importance, and about those topics they organize learning materials which should be of interest and real value to the pupil. There is *nothing* in the book to indicate the age or grade group for which it is intended, but a letter to the publisher brought to the reviewer the statement that "the book really is designed for use in whichever school year the course in general mathematics is given" and an indication that frequently this will be the last year in junior high school or the first year in senior high school.

Many new topics are introduced in interesting conversational language through descriptions of incidents in the lives of the Baxter family and particularly the Baxter twins, John and Jane. The sustained interest and intelligent curiosity of the twins and the readiness with which they grasp mathematical concepts may seem to mathematics teachers a little too good to be true, but the reviewer guesses that the developmental material will make a favorable impression on many pupils.

It is difficult in such a book to avoid errors. The brokerage table (p. 130) is obsolete. The formula for the number of linear inches of molding required for a picture frame (p. 343) does not follow directly from the diagram and accompanying statements but takes account, quite properly, of the fact that material is wasted in shaping the corner joints although no reference is made to waste. The percentage of profit is developed (p. 133) as a percentage of the cost rather than as a percentage of the selling price. One of the problems (p. 311) involves a carriage wheel 28 feet in diameter. A rule for rounding off numbers (p. 34) is at once violated (p. 35). An answer on page 366 should be 5,500 rather than 550. The tangent of an angle of 87 degrees (p. 416) is incorrectly given. In general, however, the material shows evidence of careful preparation and thorough proofreading.

In several instances, rules for new procedures are given abruptly and dogmatically without adequate opportunity for the pupil to discover the procedures himself. For example, few pupils will see why the area of a trapezoid is found by the formula given (p. 308). Several other mensuration formulas are stated without derivation or experimental determination. In one instance (p. 376) the formula is given and then verified experimentally.

The reviewer suspects that in several places the language will be a little

¹ Eugene H. Barker and Frank M. Morgan, *Mathematics in Daily Life*. Boston: Houghton Mifflin Co., 1939. Pp vi+432+vi. \$1.32.

too difficult for most of the pupils. The book is rather spotty in this respect, perhaps one of the authors is more inclined to use difficult language than is the other. Teachers will find in this book much interesting and worth-while material for an elementary course in general mathematics.

R. L. MORTON

Ohio University
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ENGLISH HANDBOOK FOR THE ELEMENTARY SCHOOL.—A contribution to useful books in English for the elementary school is a practical and attractive volume,¹ prepared by reputable experts, in a field in which not much research has been put into form for immediate use of boys and girls.

To the teacher the editor says: "This *Handbook* is designed to place in the hands of pupils a convenient and well-indexed book that will show in compact form the important conventions of English usage. It is intended as a reference book and not as a textbook" (p. 122).

Somewhat paralleling in idea the familiar handbooks indispensable in the high school, the book is planned by the authors to furnish definite help at the time the pupil needs it. There are chapters not only on such things as "Improving Your Handwriting," "Improving Your Spelling," "Using the Dictionary," "Using Capital Letters," "Using Punctuation Marks," and "Using Words Correctly," but on other conventions of language that are characteristic of the more modern techniques: "Customs in Speech," "Speaking before Audiences," "Taking Notes," "Making Outlines," and "Writing Reports, Poems, Plays."

Not only does the pupil have a reliable source of information, but the looking-up of a point again and again gives him that basis for acquiring a habit which cannot be gained in one lesson or in one exercise. Unless such mastery of the "important conventions" of usage is provided, modern teaching of English may be accused of fostering tolerance of illiteracy. Whether handbook technique is successful in the elementary school may depend on the intelligence of the teacher and the ability of administrators to handle a new problem in the use of textbooks. More and more of the high-school methods are finding their way into the elementary school. Perhaps this evolution is wise; perhaps other techniques can be devised.

The content of the book is excellent. It is a marvel in simplicity. What has been omitted is eloquent. The format of the book is so delightful that children surely will "just love it."

SOPHIA C. CAMENISCH

Chicago Teachers College

¹ *Handbook of English for Boys and Girls*. Prepared by a Committee of the National Conference on Research in English, Robert C. Pooley, Chairman. Edited by C. C. Certain. Chicago. Published under the authority of the National Conference on Research in English by Scott, Foresman & Co., 1939. Pp. 128. \$0.60.

A TEXTBOOK IN WORLD-HISTORY FOR THE INTERMEDIATE GRADES.—The unification of the social studies has been making gratifying progress since the movement began a few years ago. Among the notable textbooks for unified courses in the elementary field that have appeared in recent years is one¹ dealing with old-world backgrounds which is intended for use in the intermediate grades. Although not without its weaknesses, the book may be regarded as a valuable contribution to the literature of the social studies.

The vast sweep of world-history is presented by taking the children on an imaginary tour through the old world. The "cradles of civilization" are visited. Expeditions are made to the valley of the Nile and to historic Mesopotamia, as well as through the ruins of Greece and Rome, often under the leadership of a native guide who gathers the children around him and recounts the famous stories of his people, such as the building of the pyramids and the Hanging Gardens of Nebuchadrezzar, the story of Baghdad and the "Arabian Nights." They visit Damascus, the world's oldest city, and Palestine, the home of Jesus of Nazareth. The glories of ancient Greece and Rome are told as the children stand in the presence of the crumbling ruins of a once beautiful Greek theater or the forgotten cities of Pompeii and Herculaneum. After the remains of lost civilizations have been viewed, a brief history of each country is presented. Then the children are taken down into the streets and introduced to the people of the present day. Their ways of living are noted, and the occupations and the products of each country are studied.

As the caravan of pupils proceeds by automobile from one country to another, the geography of each land is adroitly presented and commented on as an introduction to the journey. Emphasis is placed on the fact that the occupations of the people in each land are profoundly influenced by the geographic factors. Thus the tour continues country by country from Egypt to southern and central Europe and thence across the continent to the Orient and finally into Africa.

The book, which contains eleven units, is exceptionally well illustrated. Photographs are accompanied by adequate explanations. A unique feature of the book consists in pictorial illustrations of the chief products of each group of countries. Mechanically as well as artistically, the book is a superior product.

When the book is viewed more critically, the following comments are suggested. It is not at all clear how the first unit fits into a textbook bearing the title *The Old World and Its Gifts*. Unit I deals with the facts of astronomy and physical geography, which have no more bearing on the old world and its gifts than on the new world. This unit reflects a dilemma which has always confronted "fusionists"—how to crowd into a textbook certain kinds of sacred materials which seem to bear no relation to the theme at hand, yet which, in accordance with traditional demands, must be regarded as part of the "subject matter." Again, the attempt to present five thousand years of history of strange

¹ J. G. Meyers, O. Stuart Hamer, and Lillian Grisso, *The Old World and Its Gifts* Chicago: Follett Publishing Co., 1939. Pp. viii+552. \$1.96.

lands and still stranger people and make the history meaningful to children, and to present at the same time the essential geography that should accompany the history is, to say the least, a task to make stout hearts quail. It is just possible that, so far as the child is concerned, *fusion* becomes *confusion*. The need for brevity and the desire for completeness are always at war with each other. For example, in this book the evolution of government from the family through the clan, the tribe, the kingdom, and finally to the emergence of democracy is presented in a half-page. This naïve discussion is so inaccurate that it cannot but leave a badly distorted picture in the child's mind. In other cases political and military history deal with ideas which are entirely foreign to the child's experience. For example, the causes and the consequences of the Crusades, if accurately dealt with, are beyond the comprehension of children of the intermediate grades. The same may be said of the rise and fall of feudalism and of the Renaissance, to mention but two other instances taken at random. The reviewer cannot refrain from calling the attention of the authors to an error on page 537. Slavery in the United States was not abolished in 1862 by proclamation of President Lincoln, but by the Thirteenth Amendment in 1865.

Despite the criticisms cited above, the book is well written, and its language has been kept well within the range of the grades for which it is intended. If world-history *must* be taught to pupils in the intermediate grades, the writer knows of no textbook better adapted to that purpose than *The Old World and Its Gifts*.

MILO L. WHITTAKER

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De Kalb, Illinois

HEALTH AND SAFETY IN THE ELEMENTARY SCHOOL.—A series of health and safety books¹ for elementary schools is now available by authors who have written books in this field in past years. This series, composed of eight books in the field of health and safety for the primary-, middle-, and upper-grade groups, has been based on the experience of the authors and the results of health-teaching in elementary schools. The two books for the primary level, *Spick and Span* and *The Health Parade*, are written in interesting story form,

¹ Safe and Healthy Living: I. *Spick and Span* by J. Mace Address, I. H. Goldberger, and Marguerite P. Dolch, pp. viii+142, \$0.64; II. *The Health Parade* by J. Mace Address, I. H. Goldberger, and Marguerite P. Dolch, pp. viii+168, \$0.72; III. *Growing Big and Strong* by J. Mace Address, I. H. Goldberger, and Marguerite P. Dolch, pp. x+236, \$0.76; IV. *Safety Every Day* by J. Mace Address, I. H. Goldberger, Elizabeth B. Jenkins, and Marguerite P. Dolch, pp. x+234, \$0.76; V. *Doing Your Best for Health* by J. Mace Address, I. H. Goldberger, and Grace T. Hallock, pp. viii+264, \$0.80; VI. *Building Good Health* by J. Mace Address, I. H. Goldberger, and Grace T. Hallock, pp. viii+274, \$0.84; VII. *Helping the Body in Its Work* by J. Mace Address, I. H. Goldberger, and Grace T. Hallock, pp. viii+284, \$0.84; VIII. *The Healthy Home and Community* by J. Mace Address, I. H. Goldberger, and Grace T. Hallock, pp. viii+298, \$0.88. Boston: Ginn & Co., 1939.

each story dealing with some health or safety point. These books are somewhat superior to earlier publications in that the authors have managed to make the various points clear and interesting with a minimum of wasted space in presentation. The emphasis on health and safety is placed largely on the formation of proper habits. Although these primary books are superior, it seems that the authors have, at times, failed to give logical reasons as a basis for the performance of certain health measures.

For the middle grades *Growing Big and Strong* and *Safety Every Day* present a unified program in story form. Facts pertaining to the need for various health habits are interwoven in such a way that they are likely to be effective. There are some overlapping and repetition of materials from the primary books, but the method of handling these materials is such that repetition is desirable. The content is presented in unit form. Representative units deal with such phases of health and safety as diet, teeth, posture, germs, play, and traffic safety. The colored photographs and illustrations are exceptionally attractive and appropriate. Interesting work materials and tests at the end of each chapter should make the books more interesting to the pupils.

Four books for the upper elementary grades complete the series. The materials in these books are also presented in unit form. In this series for the upper elementary grades, greater emphasis is given to the physiology of the body, although it is combined with the various phases of hygiene and safety in such a way that the usual uninteresting features of physiology have been more or less eliminated. Although the photographs and illustrations are interesting and attractive, they lack the appeal to pupils that the colored illustrations in the books for the middle grades present.

The subject matter in *Doing Your Best for Health* overlaps somewhat with the middle-grade series, yet it has been so carefully co-ordinated that again the inclusion of the material seems desirable. A number of phases of safety are included which did not appear in the middle-grade series.

Building Good Health and *Helping the Body in Its Work* are written for the same grade level and in practically the same form, although each book deals with separate phases of health and hygiene. The intended purpose of these books is to give a better understanding of the functioning of the body in its relationship to health and safety. Such units as "Exploring the Body," "How the Body Makes Use of Air," "How the Body Is Governed," "The Teamwork of Bones and Muscles," "How Boys and Girls Grow Up," "How Food and Oxygen Are Carried in the Body," "The Work of the Nervous System," "Safety through the Year," "Helping the Body To Fight Disease," and "The Secret of Safety" are typical. The authors have been successful in preparing advanced study materials in form suitable for upper-grade children.

The last book in the series, *The Healthy Home and Community*, is perhaps the most outstanding book of all. The units are entitled: "Shelter, Heat, and Light," "The Protection of Water and Milk Supplies," "The Care and Preparation of Food," "Buying Food and Planning and Serving Meals," "Narcotic Drugs and Self-medication on Trial," "Community and Home Cleanliness,"

"Ways of Fighting Communicable Disease," "Taking Care of the Sick and Injured," "Home Safety and First Aid," and "Working Together for Health and Safety." This book should give the elementary-school pupil a broad knowledge of the responsibility of the individual in the promotion of health and safety within the community. The actual use of this book proved that for upper-grade children it is one of the most valuable health books available.

Although there are a few places where the authors could have improved the manner of presentation of the subject matter, especially in the books written for the primary level, this series of health and safety books as a whole is far superior to the majority of similar books written to date.

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

- BEXLER, ROY W. *Institution-Faculty Relations in the College of Integrity*. New York: Teachers College, Columbia University, 1939. Pp. xii+178. \$2.25.
- BROENING, ANGELA M. (chairman); FALK, ETHEL MARIE; HATFIELD, W. WILBUR, MCLENTYRE, DORIS E.; and SOUTHWICK, MARGARET. *Conducting Experiences in English*. A Report of a Committee of the National Council of Teachers of English, Based on the Contributions of 274 Co-operating Teachers of English. A Publication of the National Council of Teachers of English. New York: D. Appleton-Century Co., Inc., 1939. Pp. xvi+394. \$2.25.
- Educational Yearbook of the International Institute of Teachers College, Columbia University, 1939* Edited by I. L. Kandel New York: Teachers College, Columbia University, 1939. Pp. xxiv+364. \$3.70.
- Education for Democracy*. The Proceedings of the Congress on Education for Democracy Held at Teachers College, Columbia University, August 15, 16, 17, 1939 New York: Teachers College, Columbia University, 1939. Pp. xii+466. \$2.50.
- Evaluation of Secondary Schools: General Report on the Methods, Activities, and Results of the Cooperative Study of Secondary School Standards*. Washington: Cooperative Study of Secondary School Standards, 1939. Pp. xxx+526. \$3.50
- Evaluation of Secondary Schools: Supplementary Reprints Dealing with Special Phases of the Work and Results of the Cooperative Study of Secondary School Standards*. Washington: Cooperative Study of Secondary School Standards, 1939. \$1.50.
- Evaluative Criteria, 1940 Edition: To Be Used with the 1940 Editions of "How To Evaluate a Secondary School" and "Educational Temperatures"* Washington: Cooperative Study of Secondary School Standards, 1939 (sixth edition) Pp. 176. \$1.00 (cloth), \$0.60 (paper).

- FARGO, LUCILE F. *The Library in the School*. Chicago: American Library Association, 1939 (third edition). Pp. xvi+552. \$3.50.
- FOSTER, HERBERT H., with the co-operation of WILLIAM A. WETZEL and BERTHA LAWRENCE. *High School Supervision*. New York: Thomas Nelson & Sons, 1939. Pp. xii+284.
- How To Evaluate a Secondary School, 1940 Edition: A Manual To Accompany the 1940 Editions of "Evaluative Criteria" and "Educational Temperatures."* Washington: Cooperative Study of Secondary School Standards, 1939 (second edition). Pp. xxiv+140. \$1.25 (cloth), \$0.90 (paper).
- JONES, ARTHUR J., GRIZZELL, E. D., and GRINSTEAD, WREN JONES. *Principles of Unit Construction*. New York: McGraw-Hill Book Co., Inc., 1939. Pp. x+232. \$2.00.
- MICHENER, JAMES A. (editor). *The Future of the Social Studies: Proposals for an Experimental Social-Studies Curriculum*. Cambridge, Massachusetts: National Council for the Social Studies, 1939. Pp. 178. \$1.50.
- NESTRICK, W. VIRGIL. *Constructional Activities of Adult Males*. Teachers College Contributions to Education, No. 780. New York: Teachers College, Columbia University, 1939. Pp. vi+128. \$1.60.
- YEAGER, WILLIAM A. *Home-School-Community Relations: A Textbook in the Theory and Practice of Public School Relations*. Pittsburgh, Pennsylvania: University Book Store, University of Pittsburgh, 1939. Pp. xxii+524.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL
TEACHERS AND PUPILS

- The Child and Nature: Studies in Visualization*. Verse by Colette M. Burns, photography by Robert T. Kolsbun. Boston: Expression Co., 1939. \$1.00.
- CLARK, JOHN R., OTIS, ARTHUR S., and HATTON, CAROLINE. *First Number Book*. Yonkers-on-Hudson, New York: World Book Co., 1939. Pp. 64. \$0.24.
- CRADY, KATE MCALPIN; BELLAMY, YOLA; and BLAIR, ARTHUR WITT. *Good Times at Three-Spring Farm*. Dallas, Texas: Mathis, Van Nort & Co., 1939. Pp. 234. \$0.57.
- DAILBERG, E. M. *Conservation of Renewable Resources*. Appleton, Wisconsin: C. C. Nelson Publishing Co., 1939. Pp. x+218.
- MACDONALD, ROSE MORTIMER ELLZEY. *Mrs. Robert E. Lee*. Boston: Ginn & Co., 1939. Pp. xxvi+310. \$1.60.
- NEILL, HUMPHREY B., in collaboration with HOWARD M. COOL. *Understanding American Business*. New York: Macmillan Co., 1939. Pp. x+448. \$1.92.
- SHOEN, HARRIET H., and HUNT, ERLING M. *Sidelights and Source Studies of American History*, Book I: From the Time when the First Europeans Came to the New World to the Close of the Civil War. New York: Teachers College, Columbia University, 1939. Pp. vi+104. \$0.90.
- STOW, HESTER HARRINGTON. *Greek Athletics and Festivals in the Fifth Century*. Museum Extension Publications, Illustrative Set No. 2. Boston: Division of Museum Extension, Museum of Fine Arts, 1939. Pp. 30+40 plates.

- TANNER, MAUDE M. *Billy Forget-Me-Not*. Chicago: Follett Publishing Co., 1939. Pp. 54. \$1 00.
- TIEN, JOHN N. *Christmas Comes Again: A Second Book of Christmaslore*. Milwaukee, Wisconsin: Bruce Publishing Co., 1939. Pp. xiv+136. \$1.50.
- TIBBITTS, F. LYMAN. *Occupational Guidance for Youth*, Part I: Finding Yourself. The Harlow Home Room Series. Oklahoma City, Oklahoma: Harlow Publishing Corp., 1939. Pp. 30. \$0.25.
- VAN WAGENEN, M. J., and DVORAK, AUGUST. Diagnostic Examination of Silent Reading Abilities. Intermediate Division, Form M, Part I and Part II; Junior Division, Form M, Part I and Part II; Senior Division, Form M, Part I and Part II. Minneapolis, Minnesota: Educational Test Bureau, 1939.

PUBLICATIONS IN PAMPHLET FORM

- BIMSON, OLIVER H. *Participation of School Personnel in Administration: A Study of the Conditions Which Make for Effective Participation and the Philosophy Underlying the Theory and Practice of This Type of Administration*. Lincoln, Nebraska: Oliver H. Bimson (assistant superintendent of schools), 1939. Pp. xii+118.
- BOYER, LEE EMERSON. *College General Mathematics for Prospective Secondary School Teachers*. Pennsylvania State College Studies in Education, No. 17. State College, Pennsylvania: School of Education, Pennsylvania State College, 1939. Pp. 106.
- Business Education School Situations*. Proceedings of the University of Chicago Conference on Business Education, 1939. Chicago: University of Chicago Press, 1939. Pp. viii+36. \$0.50.
- ELLS, WALTER CROSBY. *Educational Temperatures, 1940 Edition: A Series of Scales for Exhibiting the Results of Evaluation of a Secondary School, To Be Used with the 1940 Editions of "Evaluative Criteria" and "How To Evaluate a Secondary School"*. Washington: Cooperative Study of Secondary School Standards, 1939. 24 scales. \$0.50.
- Evaluation of a Secondary School Library, 1938 Edition*. Sponsored jointly by the Cooperative Study of Secondary School Standards and the American Library Association. Washington: Cooperative Study of Secondary School Standards, 1939. Pp. 50. \$0.35.
- "Films on War and American Neutrality." Current Bibliography No. 1, 16-mm. Sound Films. Prepared by the Motion Picture Project of the American Council on Education. Washington: American Council on Education (Office of Motion Picture Project, 1013 Eighteenth Street, N.W.), 1939. Pp. 44 (mimeographed) \$0.25.
- History of Education and Comparative Education*. Review of Educational Research, Vol. IX, No. 4. Washington: American Educational Research Association, 1939. Pp. 333-448. \$1 00.

- Juvenile Delinquency in Massachusetts as a Public Responsibility: An Examination into the Present Methods of Dealing with Child Behavior, Its Legal Background and the Indicated Steps for Greater Adequacy.* Boston: Massachusetts Child Council, 1939. Pp. xii+196. \$0.50.
- MASE, WAYNE E. *A Self-rating Scale for School Custodians*, Studies in Education Number (Eighteenth of the Series). Kansas State Teachers College of Emporia Bulletin of Information, Vol. XIX, No. 10. Emporia, Kansas: Kansas State Teachers College of Emporia, 1939. Pp. 24
- "Materials for Consumer Education: A Selected Bibliography." Washington: Consumers' Counsel Division of the Agricultural Adjustment Administration, 1939. Pp. 22 (mimeographed).
- Modern Science and the Exceptional Child.* Proceedings of the Fifth Institute on the Exceptional Child of the Child Research Clinic of the Woods Schools. Langhorne, Pennsylvania: Woods Schools, 1938. Pp. 52.
- MORGAN, WALTER E. *State Apportionments for the Education of Physically Handicapped Children in California.* Bulletin of the California State Department of Education, No. 9. Sacramento, California: State Department of Education, 1939 (revised). Pp. viii+36.
- REINIARDT, EMMA; BEU, FRANK A.; and HAEFNER, RALPH. *Changes in the Student Body of the Eastern Illinois State Teachers College during the Ten-Year Period 1925-26 to 1935-36.* Eastern Illinois State Teachers College Bulletin No. 147. Charleston, Illinois: Eastern Illinois State Teachers College, 1939. Pp. 52.
- SIEVERS, CLEMENT H. *The University of Wichita Reading Clinic Diagnostic and Remediation Program and Wichita Public School Reading Program.* University Studies, Bulletin No. 7, Studies II and III. Bulletin of the Municipal University of Wichita, Vol. XIV, No. 11. Wichita, Kansas: Municipal University of Wichita, 1939. Pp. 64.
- The Teacher Looks at Teacher Load.* Research Bulletin of the National Education Association, Vol. XVII, No. 5. Washington: Research Division of the National Education Association, 1939. Pp. 223-74. \$0.25.
- Teaching Combinations in Missouri High Schools.* Missouri Research in Education, Bulletin No. 1. Jefferson City, Missouri: State Superintendent of Public Schools, 1939. Pp. 16.
- TRAXLER, ARTHUR E., and SEDER, MARGARET A. "Summary and Selected Bibliography of Research Relating to the Diagnosis and Teaching of Reading, October, 1938 to September, 1939." Educational Records Supplementary Bulletin F. New York: Educational Records Bureau, 1939. Pp. 24 (mimeographed).
- Twentieth Annual Report of the Director of the Institute of International Education.* Twentieth Series, Bulletin No. 2. New York: Institute of International Education, Inc., 1939. Pp. 38. \$0.10.

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Educational News and Editorial Comment

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THE PUBLIC ATTITUDE TOWARD THE SUPPORT OF EDUCATION

THE American people have provided educational opportunity for youth with a liberality unequaled in any other part of the world. Indeed, it has often been said that we have supported education with a sort of blind faith but that our faith is now beginning to wane. It is true that during the depression certain elements in the population have cried loudly for reduction in school costs and that education has suffered more than have other public services. It is true, too, that in the future our dependent young will be in more or less constant competition with our dependent elders for the taxpayers' dollars; education will increasingly find itself in competition with old-age security. Even so, there is little reason to believe that the great mass of our citizens are any less willing today than they were yesterday to make real sacrifices in order to provide their children with a rich educational experience.

In some instances curtailment of educational expenditures may not be what the people want. Such clearly seems to be the case in Michigan, where the legislature of 1939 made a cut of 11 per cent in state aid for schools. A poll of public opinion in that state, based

on the same general technique employed in the Gallup polls, reveals that a large majority of the people of all classes and in all geographical sections disapprove of the actions of the legislature. Citizens are willing to increase their taxes, if necessary, to prevent a reduction in school expenditures; they appear to be more hospitable to education than to old-age security. The following paragraphs describing the results of the poll are quoted from the *Michigan Education Journal*.

A recent poll of public opinion in Michigan indicates clearly and definitely that the citizens of this state do not approve of the drastic curtailments that have been made in revenues for public schools. A large majority condemn the 11 per cent cut in state aid for schools made by the 1939 state legislature. The question was asked. "Do you approve of the \$5,000,000 cut in the public-school appropriation made by the recent state legislature?" The replies were: No, 68 per cent; Yes, 19 per cent; No opinion, 13 per cent.

Besides condemning the handicaps that have been forced upon the schools, the citizens of Michigan indicate their willingness to pay more taxes, if necessary, provided they can be sure that the additional revenue will go directly and specifically for public-school purposes. The question was asked: "Do you think the state should provide as much money for public schools this year as it did last year, even if it means an increase in taxes?" The answers were: Yes, 76 per cent; No, 18 per cent; No opinion, 6 per cent.

In fact, the voters of Michigan are ready to adopt an amendment to the state constitution, if necessary, to make certain that schools receive their just share of state funds. The proposition was stated: "Would you vote for an amendment to the state constitution that would take control of the state appropriation for schools away from the state legislature and set aside for schools a definite per cent of state tax money?" The answers were: Yes, 57 per cent; No, 25 per cent, No opinion, 18 per cent.

Public education was only one of several topics included in the survey. Welfare, prohibition, and politics were other subjects on which the attitude of the public was sought.

Michigan citizens did not show as much willingness to provide taxes for welfare as they did for schools. The question was stated: "Do you think the state should provide as much money for welfare this year as it did last year, even if it means an increase in taxes?" The answers were: Yes, 43 per cent; No, 46 per cent; No opinion, 11 per cent.

The proposal for an amendment to the state or the United States constitution to prohibit the manufacture and sale of liquor found approximately 27 per cent in favor and 71 per cent opposed, with only 2 per cent having "no opinion." This attitude toward prohibition checks very closely with the findings of a recent national poll on the same question. . . .

The poll reveals a united front in defense of public education. Samplings of opinion were obtained for groups representing cross-sections of diverse political, economic, social, and religious interests. The replies from every group show a majority in favor of adequate and definite funds for schools. Republicans and Democrats, Protestants and Catholics, rich and poor, farmer and urbanite—all agreed that public education should be guaranteed more adequate financial support.

A NEW COMMITTEE ON RURAL EDUCATION

THE American Country Life Association has recently appointed a committee of nationally known educators to promote the interests and the cultural improvements of the rural-farm population of the United States. Roscoe Pulliam, president of the Southern Illinois Normal University, Carbondale, Illinois, is the president of the committee. Miss Iman E. Schatzmann, formerly educational investigator for the International Bureau of Education and research assistant for the International Institute of Agriculture, Rome, has been appointed executive secretary. The purposes and the policies of the committee are described in the following paragraphs quoted from a news release.

While generally interested in rural education as a whole, and in all parts of the country, this new committee is giving initial attention to the Mississippi Valley and to the cultural and spiritual values of life on the land. It regards education as a life-long, all-inclusive process, involving the entire population and many varied agencies in addition to the school. It views education further as directly related to the vital interests and needs of the people and as involving initiative, participation, and support on the part of the local community.

In formulating its program for the improvement of rural education, the committee is taking a strong stand on federal aid for rural schools as essential in securing an adequate financial basis for the education of rural children. Even more immediate is its concern for effective, life-related teaching in rural schools. To this end the committee is focusing first attention upon rural-school supervision and teacher education, advocating practical demonstrations in both fields. It desires, also, to see special attention given to the unemployed and out-of-school youth of rural communities and to the numerous problems of the rural high school serving adolescent youth in school.

In the implementation of its program the committee is endeavoring to discover the best achievements and practices of rural education both in this country and abroad. These materials will be assembled and disseminated to all individuals and agencies interested. The committee is also encouraging the organization of regional, state, and local commissions or councils on rural education and is desirous of co-operating with other agencies in promoting conferences,

institutes, and demonstrations in this field. But its greatest hope is centered in the quality, idealism, and skill of American rural teachers. Toward the realization of these standards it is attempting to secure funds for scholarships and the advanced training of superior young people who will promise to make rural education their life-work. It is working further for improvement in both the pre-service and in-service education of rural teachers and is trying to stimulate increased activity on the part of all teacher-training institutions having farm constituencies. One demonstration in professional rural-school supervision co-operatively developed between a state teachers' college and a local county has been tentatively approved.

For the present the committee is being supported by a grant from the Farm Foundation of Chicago.

HERE AND THERE AMONG THE SCHOOLS

SPACE will permit our reporting in this issue of the *Elementary School Journal* only three items dealing with significant school practices. These relate to a plan for making educational materials readily available to teachers in a public-school system, provision for religious instruction, and a method of interpreting the school to the community.

Making helpful materials available for teachers Progressive teachers today constantly seek to enrich and to improve their instructional programs by utilizing a great variety of recently published bulletins and reports, courses of study, textbooks, maps, pictures, and professional magazines and books. No individual teacher has either the time or the resources to assemble, classify, and catalogue all such materials as would be helpful to him. It is highly important therefore that in every school system a program be worked out whereby valuable educational materials of this kind are made readily available to the instructional staff.

In a recent issue of the *Illinois Teacher*, Alta McIntire, elementary supervisor in the public schools at Berwyn, Illinois, describes what appears to be an exceedingly well worked out plan for making educational materials available to teachers. The following paragraphs are quoted from Miss McIntire's statement.

Many educational materials which are of value to teachers accumulate in any supervisory or administrative office. It is not always easy to make these

aids available at the time when they can be used to advantage by teachers. This problem was solved in our own school system this year by assembling all such materials, along with the many new materials that we secured for the purpose, in a vacant classroom which we have labeled our Curriculum Laboratory.

As soon as it became known that the room would be available, many letters were written requesting new materials of different types. The variety of topics dealt with in these materials is great, and the materials themselves range from some of the latest professional books and magazines to pamphlets, mimeographed materials, maps, charts, and pictures.

School bulletins and reports were secured from the United States Office of Education, many city and state departments of education, county superintendents of schools, universities, colleges, and libraries. Excellent materials were also secured from industrial firms, transportation and communication systems, chambers of commerce, insurance companies, and various departments of our state and national governments. . . .

Our professional books and several hundred textbooks of recent date were placed in cases along one side of the room. The professional books were arranged alphabetically by authors, and the textbooks were grouped by subjects and placed on shelves, which were labeled.

Another wall was lined with steel cases which contain open shelves. Space was reserved on these shelves for the more than twenty periodicals which we receive regularly, and appropriate labels were placed on the shelves. Other shelves were assigned to workbooks, courses of study, school reports and bulletins, materials dealing with social and economic problems, school catalogues, sample copies, and back numbers of magazines, which were contributed by people in the system.

Filing boxes arranged along the third wall contain folders in which have been placed all mimeographed materials and booklets. These materials are filed alphabetically by subjects.

Teaching aids of other types were placed in large built-in drawers. One drawer contains catalogues of all kinds of books and supplies. Another is filled with sample copies of tests, and a third is reserved for samples of materials which children should learn to read—such things as city directories, telephone books, railroad timetables, bus schedules, maps, and graphs.

Pictures have been mounted, assembled in sets, and filed in a case which was specially made for them. The pictures may be withdrawn by teachers to use in their classrooms.

Exhibits of suggestive materials are prepared from time to time to call attention to some of the helps that are available. One of the first exhibits was related to the problems of visual instruction and consisted of books, pictures, courses of study, catalogues, magazines, and bulletins. Another exhibit was related to clothing and clothing materials. This was prepared at the time a number of teachers were each teaching a unit relating to clothing.

Tables and desks have been placed in the room for the convenience of the teachers who work there. One of the desks is reserved for the person who is in charge. The teachers take turns in accepting the responsibility of helping others to find materials and in charging the materials that are withdrawn. Small filing boxes placed on top of the desk contain our card catalogue and other records. Working materials such as paper and pencils are kept in convenient places.

A group of teachers, one from each school, served as a committee to assist in classifying materials and in arranging the room. Other teachers who volunteered also helped with this work. The committee has continued to function, and each member keeps the teachers in her building informed in regard to the new materials that are received from time to time.

Religious instruction for pupils of the public school Last September a plan was put into operation in the public schools of St. Louis, Missouri, whereby pupils might be excused from their regular school work to receive religious instruction at such places and by such persons as might be designated by their parents. The classes in religious instruction are forty-five minutes long and are held once or twice a week according to the facilities of the various church groups concerned. Under no circumstances is religious instruction afforded in any public-school building.

Interpreting school activities to the general public Superintendent S. M. Stouffer of Wilmington, Delaware, has initiated a vigorous program for interpreting the work of the schools to patrons and to the public in general. Many devices and mediums are employed, such as press releases which cover both news items and feature stories, various kinds of reports, radio programs, speakers before service clubs and parents' study groups, and community meetings. Of these, one of the most successful has been the community meeting which each school holds for its patrons at least once a year. Mr. Stouffer describes this aspect of the program of school interpretation as follows:

These meetings differ somewhat from the usual set "program" in that they are specifically planned to show the parents, through a typical activity, just how the school contributes to the growth of children. Although the policy of having periodical community meetings for this purpose was set by the Central Committee for School Interpretation, each school is free to plan its own meetings and to choose the date, the time, and the type of activity which will be most conducive to a better understanding of the schools on the part of the parents.

Representative of these interpretive meetings was the following, which was enthusiastically received by the press as well as by a very large audience.

The school concerned has an enrolment of approximately 350 pupils, and every one of these pupils had an opportunity to contribute to the development of the program. The topic chosen was "Safety in the Home"—a part of the regular elementary-school program in safety instruction.

Each room first chose one part of the home for special consideration: attic, bathroom, bedroom, yard, cellar, kitchen, living-room, porch, sidewalk and streets. In order to make the study as complete as possible, the sixth grade considered safety in connection with the celebration of holidays, with special emphasis on the activities and the toys of small children. Each class then studied all the types of accidents which had already occurred or which could possibly occur in its section of the house. Great assistance in the work being done was given one group by their social-studies class on "How Science Contributes to Better Living." The children pooled their experiences and learnings and developed a series of statements on safety procedures. They then planned to transpose their discussion from the classroom to the auditorium. As all the rooms in the school were to be represented on the same program, only a short time could be allowed to each group. This limitation meant that the pupils had to select and organize their materials carefully and present their stories succinctly. The result was a very informal but highly effective program which moved forward quickly and interestingly. Highlights of the presentations were the ingenious properties, many of which had been constructed by the children themselves to demonstrate the lesson which they wished to drive home. There was, for example, the model of a gas stove artfully made by the fifth-grade pupils to give point to their discussion of safety in the kitchen. Throughout the program the lines were, for the most part, the regular conversational assertions and questions used in the classroom, together with the mottoes and the rhymes composed by the children during their study of home safety. In addition, there were several pertinent recitations and music by the school orchestra and the glee clubs.

"Safety in the Home," interpreted in this manner by these elementary-school children, served a dual purpose. It helped the parents to understand how the children learn through participation in activities undertaken for the solution of real problems which are meaningful to them now and which will have value for them in their adult life. At the same time it was an excellent bit of adult education—timely, friendly, and challenging.

A STUDY OF THE DEPENDENCY LOAD OF TEACHERS

A RECENT volume, *The Teacher's Dependency Load*, by Theresa P. Pyle, has received one of the fellowship awards of Pi Lambda Theta, National Association for Women in Education. The following paragraphs are quoted from the summary and conclusions of

this study, which has been published as Number 782 of Teachers College, Columbia University, Contributions to Education.

The most important outcome of the investigation is a realization of the complexity of the problem of dependency load. Although it has been customary to treat the data in terms of total and of partial dependency, the case studies and the more detailed analysis of the data have shown the complexity of these general terms. In the first place, each term represents a wide range of money expenditures. Expenditures on total dependents cover a range from \$100 to \$1,800 with a median amount of \$434.80. The amounts spent on partial dependents cover a range from \$25 to \$1,000 with a median amount of \$191.50. It is obvious that the two groups overlap with respect to the factor of money expended. In the second place, the same expenditure has different economic significance, depending upon its relation to the teacher's total salary and the cost of living in the community. Even the standard of living of the dependent is an item to be considered, that is, whether the amount sent by the teacher is to add the little luxuries which the dependent had been used to having or whether it provides the bare necessities required by the dependent, whether the \$500 sent by the teacher is in addition to a \$100 or \$2,500 income which the dependent receives from another source. No direct account, however, was taken of this in the present investigation. In fact, the total situation, including such factors as assistance which the dependent gives to the teacher and the special care he requires, would alter the real cost to the teacher of supporting the dependent. In the third place, psychological factors are involved which affect the significance of the teacher's dependency load. If the dependent brings inspiration, happiness, and satisfactions to the teacher and promotes his professional and civic efficiency, the money spent on the dependent is well invested. If, on the other hand, the dependent is a source of annoyance and a hindrance to the teacher's professional and personal growth, the dependency load is heavy indeed, regardless of the financial outlay. Accordingly, in the study of the dependency of any individual or group, all these factors would be taken into consideration. Arbitrary decisions should not be made on the basis of money expenditures alone.

Perhaps the second most important outcome of the investigation is the information obtained about the relative dependency load of different groups of teachers. Although married men, as would be expected, have the largest dependency load, single women were found to support more dependents than people generally suppose. This group of single women teachers support, on the average, what may be considered the equivalent of one dependent per teacher. The analysis of this general figure showed that 25 per cent of these single women totally supported dependents, with a median amount of \$520 spent per dependent. Seventy-five per cent supported only partial dependents and spent a median amount of \$190 on each dependent. It was found also that of the 75 per cent who partially supported dependents 57 per cent were helping with the support of two or more dependents. It is possible that little is known of the

dependency load of single women because, as found in this investigation, a large per cent of the single women teachers are supporting dependents not living with them. Also, when the single woman teacher lives with one or both parents it is doubtful whether the general public can judge who supports and who is supported. There is no such uncertainty with regard to the married man's support of his family.

A third outcome of the study is an understanding of the types of dependents supported by these different groups of teachers. It is known that married men teachers are for the most part supporting wives and wives and children—dependents of their own choosing. The findings of this investigation show that the greater number of the single women teachers who have dependents support parents or siblings—dependents not always of the teacher's own choosing and to whom there may be others who bear as close a blood relationship. Married women teachers were found to be supporting husbands or children and in some cases included the support of parents in their patterns of dependency. The single men teachers had the same types of dependents as were supported by single women teachers, but the small number and youth of these single men teachers do not warrant generalizations. It is of interest to note that the support of parents and siblings is the characteristic pattern of women teachers and particularly of the single women teachers. . . .

A fifth outcome of the study is the information obtained concerning the professional and community activities of teachers. The findings of participation of teachers in professional activities, showing that those teachers with dependents have a larger average number of professional activities than do teachers without dependents, lead to the conclusion that teachers with dependents may have a greater contribution to make to the profession. Although the support of dependents may offer certain limitations to the teacher, it appears to act as a professional stimulant. Teachers for the most part participate in community activities and social clubs of a conventional type. Although there is no difference between the groups with and without dependents as to amount of participation for all teachers or for married women teachers, single women teachers with dependents have an average of one more community activity per teacher than have single women without dependents. The patterns of dependency held by single women, together with the lack of satisfactions associated with these patterns, may account in part for their increased participation in community activities.

SELF-HELP FOR SCHOOL CUSTODIANS

A RECENT issue of the Bulletin of Information of the Kansas State Teachers College of Emporia bears the title *A Self-rating Scale for School Custodians*. In the Introduction the author, Wayne E. Mase, describes the nature and the purpose of the study as follows:

This study has as its main objective the building of a self-rating scale for school custodians. The value of the study is in furnishing a scale by which custodians may improve their efficiency and personal qualifications through self-rating. Custodians should use this scale as a basis for furthering their own knowledge and to enable them to see the desirable changes that can be made in *working methods*. Frequent use of the scale should lead to improvement. This improvement is necessary, as the ever-changing educational program demands more and more an efficient janitor-engineer.

In this study the writer has made no attempt to standardize either the work or the qualifications of the school custodian. However, there are definite duties and qualifications that authorities feel are most desirable for an efficient custodian, and these essentials are presented in this scale.

The self-rating scale makes it possible for custodians to check themselves and find weaknesses that they might not otherwise find. It is definitely not the purpose of this study to provide a tool by which superintendents may measure the efficiency of their custodians for promotion or dismissal. It is suggested that superintendents secure these scales and present them to the custodian solely as a means to self-improvement.

The items in the scale are organized under the following categories: "Personal and Social," "Co-operation," "Care of the Building," "Care of School Property Other than Buildings," "Economical Operation," and "Miscellaneous."

A STATE-WIDE STUDY OF THE STATUS OF THE ELEMENTARY-SCHOOL PRINCIPAL

THE Research Committee of the Wisconsin Elementary Principals' Association, consisting of Grace Pekel, G. R. Leistikow, and S. A. Oellerich (chairman), has published a report entitled "The Status of the Elementary-School Principalship in Wisconsin." One of the purposes of the investigation was to identify some of the more important problems of the elementary-school principalship and to set up progressive standards for the head of any elementary school. Principals both in Wisconsin and in other states will find it profitable to compare their own situations and their own activities with the situations and the activities of the principals investigated in this report, which may be obtained from Fred Schnell, principal of the Jefferson School, Sheboygan, Wisconsin. If studies similar to this were made for other states, a more comprehensive view could be had of the elementary principalship as a functioning institution.

Some of the more important findings of the reports are summarized as follows:

Seventy-eight, or only 21 per cent [of the principals included in the study], give their entire time to administration and supervision, while 304 do not give their entire time to administration and supervision. One hundred and twenty-five of the principals report that they teach from sixteen to twenty hours each week and only seventy principals teach from one to five hours each week. Over half of those reporting, or 195, give from six to ten hours per week to supervision, while 159 find time for one to five hours of supervision each week. We might conclude that in the great majority of the cases, principals are still spending too much of their time and energy on activities that could just as well be delegated to clerical help, in order that principals might spend at least 60 per cent of their time during school hours in supervisory work. It is interesting to note that 218 give from one to five hours each week to clerical work, and only one gave from sixteen to twenty hours each week to clerical work.

It is generally agreed that a principal's success or failure depends in a large measure upon his community relationships. He should be able to understand and assist in controlling the social forces that are found in any community, be able to interpret to his community the educational program of his school, and at the same time sincerely participate in the activities of the community that he serves. Well over half of our entire principals' group give from one to ten hours each month to community activities, while one-fourth of the remaining principals give from eleven to twenty hours each month, which proves that the elementary principal in Wisconsin does many other things for his community besides his regular school work. The results indicate that principals give most of this extra time to parent-teacher associations, church, and service activities. Approximately half of these principals have clerical help, either part-time or full-time. One hundred and ninety-four out of 358 reported a need for additional clerical help, while 164 request no additional help. The majority requesting help asked for one to ten additional hours of clerical help each week so that they might have more time for their professional responsibilities.

Sixty-eight per cent of the group participate in one way or another in the selection of their teachers. It was found that 75 per cent participate in the assignment of teachers in their schools, with 60 per cent having full authority in teacher assignments. Sixty-one per cent participate in the transfer of teachers. Seventy per cent report that their custodians are directly responsible to them as principals. These results are encouraging and should tend to give the principal increased responsibility in the future as to the selection, assignment, and transfer of his teachers, as well as the direction of his custodians or janitors. As this tendency advances in every community, so will the professional status of the principal advance as well.

The majority of these principals have had their professional training in Wisconsin colleges or at the University of Wisconsin. It is significant to note that 69 per cent have at least their first degree, and only 31 per cent are in the one-,

two-, or three-year diploma classification. It is quite generally agreed that it would be a great improvement to the status of the elementary principalship if each principal had at least the qualifications represented by a college degree and, wherever possible, an additional year of graduate work. Reports indicate, however, that a great many principals who have no degree at present are rapidly working toward degrees through summer-school attendance. It was noted that 201 principals received their major educational preparation for the teaching of high-school subjects, while only 120 had their major training for the teaching of elementary subjects. We might conclude that the majority of these people had been promoted from high-school teachers to elementary-school principals. There seems to be a definite trend toward the additional educational training of our elementary principals during the past ten years with figures for 1938 far surpassing those of any previous year—an encouraging factor that we hope will continue. Of the 312 principals who plan to take additional educational work, 49 per cent are working on the Master's degree—another factor that bears out previous returns on certain questions in this study and points toward a healthy professional interest among the majority of our elementary principals in Wisconsin. Most of these principals are planning additional work for some kind of degree, with 17 per cent of the group planning to work on the Doctor's degree.

Membership reports in educational organizations show the Wisconsin Education Association, the local associations, and the National Education Association running in first, second, and third place. The three most helpful educational periodic publications were the *Wisconsin Journal of Education*, the *Journal of the National Education Association*, and the *Elementary School Journal*, with many others noted in fewer returns. From the replies received most everyone was honest in admitting that he or she needed help and evidently realized that there was still need for individual improvement. Forty-six per cent seemed to indicate that they needed assistance in curriculum construction, and 38 per cent in the general field of supervision. Others needed assistance in community relationships and general administration.

SUMMARY OF RECENT RESEARCH RELATING TO READING

FOR a number of years the Educational Records Bureau has been publishing, from time to time, summaries of the research literature on reading, together with an annotated bibliography of recent investigations. The most recent of these was compiled by Arthur E. Traxler and Margaret A. Seder and is entitled "Summary and Selected Bibliography of Research Relating to the Diagnosis and Teaching of Reading, October, 1938 to September, 1939." The summary is organized under the following headings: "Reading readiness and beginning reading," "Reading interests and leisure reading,"

"Reading in the content subjects," "Studies of vocabulary lists and vocabulary building," "The vocabulary and content of readers," "Reading tests and testing procedures," "Phonics," "Speed of reading," "Relation of visual and speech defects to reading disability," "Relation of eye-movements to reading ability and other factors," "Relation of dominance, handedness, eyedness, and reversals to reading," "Readability," and "Diagnosis and remedial training in reading." In addition to the summary, the bulletin contains a selected annotated bibliography of 114 items. This booklet may be obtained from the Educational Records Bureau, 437 West Fifty-ninth Street, New York City. The price is twenty-five cents a copy.

A DESIGN FOR THE SOCIAL STUDIES

THE National Council for the Social Studies has recently published a volume entitled *The Future of the Social Studies: Proposals for an Experimental Social-Studies Curriculum*. When the Commission on the Social Studies of the American Historical Association made its report a few years ago, there was some disappointment among teachers that no recommendations were made with respect to a specific course of study which might be employed in schools throughout the country. For a number of years there has been a growing demand that the National Council for the Social Studies attempt to formulate a program which might prove "adapted to the needs of school children at every stage of their growth, flexible enough to meet the regional demands of the various sections of the country, comprehensive enough to cover the areas and concepts essential to an understanding of our dynamic society, and well enough defined to furnish a design into which our more or less chaotic thinking and practice might be fitted in a semblance of unity and order." As a result of this demand the National Council appointed a committee last year and charged it with the duty of making recommendations of the next steps to be taken in attacking in a practical way the problem of the social-studies curriculum. In the meantime the Committee on Publications was authorized to request some twenty leaders in social-studies education for statements setting forth in detail "the specific content, the types of content, or types of experience" that they would like to see included in an ideal

curriculum for the twelve or fourteen years of the elementary and the secondary schools. Replies were received from fifteen outstanding leaders in the field, and their replies constitute the main content of the volume.

In an introductory chapter James A. Michener formulates some of the insistent problems which must be solved in any attempt to develop a satisfactory curriculum in the social-studies area. He says:

In constructing a social-studies course of study, or even when considering the question of the social studies abstractly, several annoying problems arise that must be answered before one can honestly proceed to make any decisions. Any one considering the social studies today must be aware of the following questions for which there are at present no clear-cut answers.

A course or a collection of classes.—Up to the present few schools have really had a social-studies course; instead they have had a collection of individual classes which were supposed to integrate roughly on the basis of the report of the Committee of Seven as modified by the Committee on Social Studies of 1916 and the Committee on History and Education for Citizenship. A social-studies course implies a twelve-grade sequence of carefully integrated experiences leading to a clearly understood objective.

A multiple course of study.—Social-studies teachers will soon have to make a very difficult decision. In fact, many are already faced with the dilemma of fitting old courses to a new situation. Secondary-school population will soon be radically changed if unemployment and the extension of compulsory school attendance continue. This means that considerable numbers of students for whom history, economics, and sociology as taught at present are unsuitable will demand attention. At the same time there is considerable justified apprehension concerning the fate of the very able student who can profit from advanced courses in the social sciences. It appears to many that such students are being cheated when schools make no provision for the traditional and potentially invigorating courses in history and the other social sciences. It may well be that the social studies will be forced to adopt a dual or even a multiple course of study.

The core curriculum.—In many schools the core program is absorbing much of the social studies. This is not necessarily regrettable, but it would be a waste of long accumulated experience if the social studies were not to find a sensible place in this program. It may possibly be that in typical schools of the future there will be no social-studies department, but if such a decision is made, it should be made consciously, and not by default.

Social development.—This is a most pressing problem for the social-studies teacher. On the one hand there is the school which delegates to social-studies courses all responsibility for the social development of students; whereas an-

other school restricts its teachers to preparing children for rigorous external examinations on the facts of history, civics, and geography. Similarly, there are social-studies teachers who arrogate to themselves the whole job of caring for the social development of their students; whereas others seem offended if they are held in any way responsible for what children do outside the classroom. Quite probably the social studies will suffer if its curriculum or its teachers adopt either of these extreme alternatives, but the middle course through this confusion of responsibility is by no means clearly defined.

Civic education for an age of change.—Social-studies curriculum-makers must soon decide just how sincerely they believe that their field can contribute to the education of young men and women who in all probability will face and live through a life of rather continuous change. Specifically, how important is training in democracy? Shall children be taught the necessity for certain economic readjustments? Shall the social studies undertake the difficult task of encouraging students to consider objectively the alternatives to present political patterns? Shall children be taught to adjust to the alternately minor and major sociological disruptions at present under way? Shall the social studies assume direct responsibility for the inculcation of the habits of good citizenship?

Indoctrination.—However one answers the preceding questions, the problems of indoctrination, persuasion, and emotionalization are bound to enter into the discussions. Anyone constructing a social-studies curriculum today must consider very carefully the probable future of emotionalized learning.

Some specific questions concerning content.—And finally there are many somewhat less inclusive problems concerning whether one will or will not include the study of new problems that seem to relate to the social studies. The following are illustrative: (1) If present tendencies toward centralization of authority and at the same time enhancement of local responsibility continue, the community will play an increasingly important role in national life. Shall community study center in, and be planned for by, the social studies? (2) Shall the new viewpoints in history, economics, geography, sociology, and the other social sciences be incorporated into the course of study? (3) Shall the co-operative movement be studied? (4) Shall the study of United States foreign policy be extended so as to include ample treatment of South America and Asia? (5) Shall the difficult problems of growth, emotional maturation, group behavior, and marriage find a place in the social studies? (6) Shall the social studies attempt to deal with the most urgent problem facing many young people, the place of youth in American life? (7) Shall the social-studies course of study make specific provision for the teaching of necessary skills?

This publication should be especially welcome to teachers of the social studies and curriculum-makers, and principals and superintendents cannot afford not to examine it with care.

WHO'S WHO FOR FEBRUARY

The authors of articles in the current issue WILLIAM C. REAVIS, professor of education and superintendent of the Laboratory Schools at the University of Chicago. VIRGIL E. HERRICK, assistant professor of elementary education in charge of the Educational Clinic at Syracuse University. LEO J. BRUECKNER, professor of elementary education at the University of Minnesota. ROBERT KOENKER, student at the University of Minnesota. REUBEN R. PALM, graduate student at Stanford University. MARY I. PRESTON, M.D., instructor in pediatrics at the School of Medicine, Stanford University, San Francisco, California. NELSON B. HENRY, associate professor of education at the University of Chicago.

The writers of reviews in the current issue HENRY J. OTTO, consultant in education of the W. K. Kellogg Foundation, Battle Creek, Michigan. DOUGLAS E. SCATES, associate professor of education at Duke University. ANNE E. PIERCE, head of the department of music in the Experimental Schools and assistant professor of music at the University of Iowa. HERBERT F. SPITZER, assistant professor of education and general supervisor of the University Elementary School at the University of Iowa. A. W. HURD, professor of education, dean of the College, and director of placement at Hamline University, St. Paul, Minnesota. VIRGIL STINEBAUGH, assistant superintendent in charge of junior high schools and curriculum studies in the public schools of Indianapolis, Indiana. D. S. BRAINARD, professor of history at State Teachers College, St. Cloud, Minnesota. WILLIAM J. BERRY, professor in the Department of Geography and Geology at Western State Teachers College, Kalamazoo, Michigan. HELEN R. FISH, teacher of English at South High School, Minneapolis, Minnesota.

PERSONAL CHARACTERISTICS DESIRED IN PUBLIC-SCHOOL EXECUTIVES

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OFFICIALS responsible for the selection of school executives and persons aspiring to positions of importance in educational administration should be greatly concerned with the personal characteristics desired in candidates for executive positions. The reason for this concern is the fact that the selection of the school executive usually is determined by personal characteristics. Among a group of candidates for an important executive position, such as the superintendency of a city school system, the educational and professional qualifications and the experiential backgrounds will be much the same. The board responsible for the selection of this executive might write the names of five or ten of the leading candidates on slips of paper and, by choosing blindly from the list, secure a well-qualified person for the position to be filled.

Few boards would be willing to select a school executive by the method just described. The board members usually think of the needs of the position in terms of the qualifications that the preceding executive did or did not possess. These qualifications are invariably personal. The candidate who reveals, then, to the greatest extent some or all of the personal qualifications considered desirable by the selecting officials has a decided advantage over his competitors who may be equally or better qualified on professional and experiential grounds. The election thus usually goes to the candidate who possesses the personal characteristics which the board members desire.

It does not follow that the person chosen is the best selection for the position. As a matter of fact, the personal characteristics which determine the selection of the candidate may not count heavily in his subsequent administrative success. Other characteristics fundamental to successful executives may have been overlooked in the

consideration of candidates, for the reason that the personal characteristics which make for success were not known by the board members responsible for the choice. Appraisal of the various candidates in terms of the personal characteristics actually desired in school executives instead of characteristics pleasing to individual members of the board might have resulted in a different and a better choice.

An example will suffice to make clear the distinction pointed out in the foregoing paragraph. In recent years some boards have given undue weight to youth in candidates for executive positions, when the very nature of the executive's duties in responsible positions requires extensive experience in the testing of principles of administration essential to wise leadership and dependable executive decisions. Candidates under thirty-five years of age are given preference to candidates over forty-five on the grounds that the choice is being made for a long term of service and that any mistakes resulting from inexperience in the early years of service will be more than compensated for by the longer period of service of the younger candidates. The board members have evidently been unduly influenced in their views by the sporting page in the newspaper, where athletes are characterized as "old men" before they attain the age of thirty-five.

Other sections of the newspaper might convey a very different impression, for example, the following quotation from a column in a metropolitan newspaper.

Men past forty-five are very desirable in many positions. They are free from emotional pep. They are not "stunt" performers. They have two valuable assets, experience and judgment. These are not merely attributes, but they are good qualifications worth dollars and cents. A survey in Wisconsin of 405 industrial corporations showed that only 18 of that number were now restricting to the age of forty-five. A digest of business done in 1936 all over the nation showed that 74 per cent of the worth-while business in all lines was developed under the control of men whose average age was 58.2 years. Henry Ford was practically unknown at forty-five, Edison achieved greatness beyond forty-five, Gladstone became a world-figure after fifty. Business people are beginning to want more men with "seasoned business experience," men of years, men who have personal poise, are impressive in contacts, who have judgment and constructive as well as conservative ideas.

Since the median age of city superintendents for the country as a whole is forty-four years¹ and since the median term of service of these officials in their present positions is only six years,² it is evident either that these public-school executives do not desire long terms of service in the earlier stages of their professional careers or that short terms are considered preferable to long terms by most boards of education. Furthermore, the fact that only 3 per cent of the city superintendents have served twenty-five years or more in their present positions indicates clearly that relatively few superintendents, regardless of the term of service contemplated at the time of employment, actually serve their communities for long periods of time. Hence the preference given to the youth of a candidate on the ground that he is being employed for a long term of service is a futile criterion, since it is virtually inoperative in practice.

The turnover of school executives revealed in the foregoing paragraph can probably be justified, in the large majority of cases, by the fact that the major contribution of a school executive is generally made in the first ten years of his service and that after this period his contribution is relatively minor in character. School executives generally recognize the truth of this statement and are fully as eager to move on to new positions offering new challenges and possibilities for growth as are boards to bring new life to their schools through change in executive leadership.

Inasmuch as the selection of a school executive is the most important single responsibility of a board of education, mistakes can be avoided and the resulting losses from too frequent turnover can be averted through wise selection. The chance of wise selection is uncertain if the personal criteria employed in choosing are not the characteristics that uniformly make for success on the part of school executives. Evidently, then, a consideration of the personal characteristics needed by school executives is a matter of great importance both to the board members responsible for selection and to the persons seeking professional careers in executive positions.

¹ *Educational Leadership*, p. 101. Eleventh Yearbook of the Department of Superintendence Washington Department of Superintendence of the National Education Association, 1933

² *Ibid.*, p. 117.

The Eleventh Yearbook of the Department of Superintendence published in 1933 gives considerable space to the personal characteristics needed for success in positions of executive leadership. Nine individual characteristics¹ are reported as being desirable, and these characteristics are scaled both negatively and positively for the use of executives in self-evaluation and self-improvement. A list of 30 characteristics reported by 264 board members² as necessary for success as an executive and 28 qualities regarded as essential by 4,469 school administrators³ are also reported in the yearbook. The lists are somewhat similar, but the agreement as to essential characteristics does not appear to be high.

It is apparent that neither successful selection nor successful self-improvement can be expected to result from the breaking-down of personal qualifications into such a large number of individual characteristics. What the problem requires is the identification of the few personal characteristics that are actually essential in school executives. Synthesis of the foregoing lists, as well as numerous other lists of such characteristics, reveals that the successful school executive should rate high in the following characteristics: (1) unselfish motivation, (2) scholarly ability, (3) industry, (4) ability to get along with people, and (5) executive capacity. Each of these characteristics will be discussed briefly in turn.

1. Board members interested in the welfare of their schools are doomed to disappointment if they select for their executive a person whose *controlling motivation* is selfish rather than unselfish. Such an executive may possess other desirable characteristics which make for success in executive work, but his selfishness of purpose will soon become apparent through his constant candidacy for more lucrative positions, through his eagerness to accept personal credit for all improvements made in the school system, and through the manifestation of exceptional canniness in securing salary increases for himself irrespective of the salary status of other members of the staff.

The discovery by a school board of the controlling motivation of a candidate is often a difficult matter, since in the personal interview questions designed to reveal the characteristic might prove embarrassing both to interviewers and to the individual being interviewed.

¹ *Ibid.*, pp. 330-38.

² *Ibid.*, p. 291.

³ *Ibid.*, p. 339.

However, the past record of the candidate, if investigated by the board, will invariably reveal the trait in question. Boards of education in the selection of executives should, therefore, always take the precaution of carefully investigating the records of their leading candidates in former positions.

Whether it is possible for a person with selfish purposes to change his motivation and become unselfish is a matter open to doubt. Whatever the answer, it is certain that persons engaged in school administration cannot look forward to a successful career in executive work unless they are willing to place "service before self" as a principle of control in their philosophy of life.

2. The nature of executive work makes heavy demands on the mental capacity of persons who serve as school administrators. The answers to the questions confronting executives are not to be found in patterns of experience which can be recalled as ready-made answers. General principles reached through analysis and synthesis of experience are important, but they are serviceable only after the various facts that bear on a question are comprehended and the implications are foreseen. To be a successful executive, then, one should possess at least average intelligence—better than average is preferred.

The foregoing characteristic cannot be measured solely by a candidate's record in college; yet a record dominated by low marks, with no work appearing as good or superior, is adequate reason for dropping a candidate from consideration in favor of persons revealing greater aptitude for intellectual work. Since a school executive is required frequently to make written reports and to address groups on issues of importance to his school, something more than mere technological skills must be possessed by persons occupying executive positions. Power to think clearly in the major fields of knowledge and to think deeply in the organization and administration of schools is required of executives who would be regarded as intellectual leaders of their boards of education, instructional staffs, and school communities.

3. The school executive must be a dynamic and an energetic individual, not a person who is lacking in industry or drive. In judging this characteristic of a candidate, an alert board of education need

not be easily deceived. The output of the candidate in his previous positions is the best measure of the important personal characteristic here desired. If he has little to show for his previous executive efforts and justifies his lack of achievement by the faults of the personnel with whom he has worked, the board has ample reason for turning to other candidates.

Conditions such as ill health, lack of physical vigor, or personal load might militate against the achievement of an executive in any given year. Temporary loss of industry through such conditions should not be allowed to prejudice the board against the consideration of a candidate. However, it should be pointed out that executive work is taxing and that persons lacking in the physical stamina necessary to stand the strain of hard work or individuals indisposed to vigorous and sustained industry should seek employment in less strenuous positions.

4. Ability to get along with people is an indispensable characteristic of the successful executive. Candidates with objective personalities (individuals who are naturally group workers) as opposed to candidates with subjective personalities (individuals who are lone workers) are greatly to be preferred for executive positions. The former type is co-operative, democratic, friendly, kindly, and considerate; the latter type is often un-co-operative, dictatorial, unfriendly, irascible, and contemptuous. Persons of the objective type are happiest and most efficient when working with people; those of the subjective type are happiest when working alone. If the subjective individuals are required to deal with other people constantly, as is the school executive, they tend to become irritable and to create friction in personal relations—conditions which make for low morale among associates.

Boards of education should be certain that candidates for executive positions possess objective personalities if they want to avoid difficulties in the internal administration of their schools. If the interview with a candidate fails to reveal the characteristic desired, a careful inquiry among former associates as to the nature of the candidate's personal relations with his fellow-workers will usually disclose the information desired by the board.

5. The final characteristic, executive capacity, is difficult to de-

fine but easy to identify in the person who possesses it. It is probably a complex of traits rather than an individual characteristic, although some single characteristic may stand out prominently—leadership, initiative, courage, resourcefulness, adaptability, or force. The quality or group of qualities may be inborn in the individual, although not necessarily so. They may be cultivated and developed if other characteristics essential to successful executive work are possessed. Generally speaking, however, candidates whose backgrounds of professional experience fail to reveal evidences of successful accomplishments of the creative type should be regarded with suspicion as potential executives.

The school executive occupies a position of influence and responsibility in American education. His accomplishments will be determined in no small degree by the extent to which he develops the personal characteristics desired by the officials responsible for employing him. Through mutual understanding of these characteristics candidates for executive positions and their employing officials may improve the standards of executive leadership and accomplishment in public-school administration.

SELECTING THE CHILD IN NEED OF SPECIAL READING INSTRUCTION

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A PROBLEM FOR THE CLASSROOM TEACHER AND THE READING SPECIALIST

THE selection of the child who will profit by special instruction in reading is a problem of concern, not only for the special reading teacher or remedial expert, but also for every teacher who is interested in a child's use of this skill in his everyday activities. It makes little difference whether the teacher is a part of an "incidental" or "formal" reading program. In one case he is interested in determining the child or groups of children in need of special instruction in reading in order to meet the demands of class activity, and in the other the teacher is concerned with the reading needs of the child who is not able to keep up with the rest of the class. The procedures used in either case reflect definite conceptions of the nature of the reading process and of child growth.

For the purposes of this article the assumption is made that the problem of selecting children who will profit by special reading instruction is the same for both the ordinary classroom teacher and the remedial-reading specialist. The actual difference is only a matter of degree in diagnosis and treatment and not a question of fundamental purpose or philosophy. To remove the specialized reading efforts of either expert or teacher from the reference framework of a well-rounded educational program would vitiate the contribution of these efforts to the educational development of the child.

The procedures used for selecting the child in need of special reading instruction may be classified into two main groups, each of which is actuated by a particular philosophy and attitude toward this phase of the child's educational growth.

FIRST GROUP OF SELECTION PROCEDURES

In the first group of procedures the child's reading ability is considered in relation to some external standard or point of reference, and there is a tendency to ignore the general maturation of the child in regard to this process. Typical aspects of this judgment are (1) evaluating the child's reading on the basis of teacher or parent expectancy, (2) identifying his skill on the basis of the accomplishment of his grade or class group, (3) determining his success in relation to the norms on a standard or teacher-prepared reading test, or (4) determining the presence or the absence of the ability to read at all.

Surveys of present practice indicate frequent use of these procedures in meeting the problem. It is obvious to the teacher that, if a sixth-grade child can read only third-grade materials or is in the lowest 10 per cent of his class group on the basis of a reading test, something is wrong with his reading. If the child cannot read, either actually or relatively, there is little question in many minds as to the immediate need for a specialized instructional program in reading. The usual justification for such a program is to enable the child to pass the grade, to get up to grade norm, or to read the material in the basic textbook. The very obviousness of this conclusion tends to blind one to the possibility of further examination of its validity.

Certainly the research literature in reading has been vague both in definition of the poor reader and in suggestions for selective procedures. With a few exceptions, the criteria used in the research investigations are little, if any, better than those used by teachers in the classroom. In fact, they are usually based on the same philosophy of accomplishment. Thus it seems there is need for procedures of selection based on broader conceptions of the reading process and for a standard of accomplishment which is an intimate part of the child's own development.

SECOND GROUP OF SELECTION PROCEDURES

The second group of procedures is based on the assumption that the only criterion of reading success which may be used with any justification in an educational program is the child's growth and

maturation. While the techniques vary with respect to the specific phases of the child considered in determining a criterion of growth or maturation, in all procedures considered in the second group there is refusal to accept success measured by external standards in a single skill as sufficient for judgment concerning the need for specific training in that skill. Nobody would deny the value of probing a single skill for the purposes given for procedures in the first group; yet it is difficult to accept these purposes as being the answer to the problem discussed. In general, in the methods in the second group an attempt is made to compare what the child is doing in reading with various other indices of accomplishment and, from this comparison, to judge whether the reading is significantly lower than skills in other areas. In other words, *the child may be the poorest in the class or in the last percentile on the standard reading tests and still not be a reading problem!* His reading accomplishment may be no better or no worse than his accomplishment in the other skills or in other significant aspects of development. To give additional training in reading and ignore the lack of maturity in other areas is merely to waste time and to set up feelings of distaste for reading, which often spread to other activities of the child's school life. The child needs something much more basic than reading instruction alone. He needs time to mature. He needs opportunity for adding enriched experiences. Reading is intimately related to the development, the extension, and the enrichment of the basic concepts of the educational program and as a result cannot be forced beyond the development of all those other skills, attitudes, and understandings which are a part of this basic conceptual development. To attempt to overemphasize one phase would distort the design of a child's growth. In addition, specialized training in reading in cases of the type mentioned produce few fundamental improvements unless accompanied by attention to many matters other than reading. Even then improvement is a slow process. In brief, results in reading are dependent primarily on the general advance of the child in all areas.

From this point of view, four procedures might be suggested as valuable for attacking the problem of selecting the child who would profit by specialized training in reading: (1) the disparity tech-

nique,¹ (2) Monroe's reading index,² (3) Olson and Hughes' "split-growth" analysis,³ and (4) the case-study technique.⁴

The disparity technique.—The purpose of this technique is to compare the child's *capacity for reading* with his *present success in reading* and to infer from this comparison whether the child should receive special reading instruction. The assumptions underlying this procedure are that the mental age of the pupil is the best index of capacity and that reading age obtained on one of the common achievement test batteries or reading tests is an adequate index of actual reading accomplishment. A disparity in favor of mental age indicates the need for reading training. On the other hand, little or no difference between the mental age and the reading age of the pupil indicates that he is reading as well as his general maturity should lead one to expect. The advantage of this procedure is that it is easily understood by the average teacher and is based on information usually available in the average school system. This course seems to be a more valid selection procedure than procedures in the first group because the adequacy of the child's present reading is judged by his potential ability to read instead of by some external point of reference based on little knowledge of the child and his backgrounds.

The use of this technique raises the question whether judgments based on two tests are valid. Many persons would agree that such judgments have greater reliability than judgments of the type mentioned for the first group of procedures. It has been pointed out by

¹ Heber H. Ryan, "A Study of the Concomitants of Disparity between Scholarship and Ability in a Secondary School" Unpublished Doctor's thesis, Department of Education, University of Chicago, 1932.

² Marion Monroe, *Children Who Cannot Read*, pp. 14-15. Chicago: University of Chicago Press, 1932.

³ Willard C. Olson and Byron O. Hughes, "The Child as a Whole." Ann Arbor, Michigan: University Elementary School, University of Michigan, 1939 (planographed).

⁴ The case-study technique described in this article is the procedure used at the Syracuse University reading clinic. Descriptions of other interpretations of case-study procedures and organizations may be found in: (a) Arthur E. Traxler, *Case-Study Procedures in Guidance*, New York: Educational Records Bureau, 1937; (b) Theodore L. Torgerson, *The Diagnosis and Treatment of Pupil Maladjustment*, Milwaukee, Wisconsin: E. M. Hale & Co., 1938; (c) Edward William Dolch, *A Manual for Remedial Reading*, p. 158. Champaign, Illinois: Garrard Press, 1939.

a number of investigators¹ that inability to read has a direct effect on the mental ages obtained from individual and group tests of intelligence and as a result might lessen the difference between the mental and the reading age. This effect, in turn, might result in a judgment based on this test data which would prevent the child from getting the very training that he needs most.

A second objection to the use of this technique may be made on the basis of the narrowness of the range of skill measured. To give only a reading test with its narrow range of sampling is not only likely to be inadequate as a measure of reading ability but is almost certain to be a poor general index of the child's learning development. The reading skill should be evaluated not only by a test in reading but also by making comparative judgments with other skill areas not directly connected with reading. This second comparison would not only create an opportunity for greater insight into the educational progress of the child but would also establish another point of reference for evaluating the results of the reading test. Recognition of this last criticism is made by Marion Monroe in her development of the reading index as a means of selecting children for reading instruction.

Monroe's reading index.—Marion Monroe, in order to arrive at a single index of reading ability, uses a combination of chronological age, mental age, and success in arithmetic and compares this combination with the child's reading success. If a child's reading closely approximates his development in the three other areas, the child is not considered a reading problem. Extreme deviations below 1.00 are taken as evidence that the child has reading difficulty.

This technique is a distinct improvement over the disparity procedure because the inclusion of chronological age and skill in arithmetic introduces two areas of development not so likely to be influenced by difficulties in reading as are reading and intelligence tests. This broader base for comparison is likely to produce a more valid judgment than a single index of mental age or of reading.

¹ a) Marion Monroe and Bertie Backus, *Remedial Reading*, pp. 21-22 Boston: Houghton Mifflin Co., 1937.

b) Donald D. Durrell, "The Influence of Reading Ability on Intelligence Measures," *Journal of Educational Psychology*, XXIV (September, 1933), 412-16.

The reading grade, as well as the mental, chronological, and arithmetic grade levels, may be obtained through the use of an intelligence test and any of the common achievement test batteries. The actual calculation of the reading index involves dividing the reading grade scores by the average of the mental, chronological, and arithmetic grade scores. If they closely approximate each other, the reading index is 1.00; if the reading grade score is less than the average of the other three, the index becomes less than 1.00 and may range theoretically from 0.00 to 1.00. On the other hand, the reading grade may be greater than the average of the other three, and in this case the index becomes more than 1.00. Monroe and Backus interpret the index in the following manner:

A reading index of 1.00 represents a harmonious relationship among the child's various capacities and achievements. Indices above 1.00 indicate special abilities in reading and those below 1.00 indicate specific retardation in reading. Roughly, indices between .90 and 1.10 represent average scores; .80 to .90 represent marginal disabilities; and those below .80 represent severe disabilities.¹

While the reading index is an improvement over the disparity technique, both procedures are open to objection on the basis of being a single cross-sectional measurement of a longitudinal and continuous process. A single camera shot of this type has the advantage of expediency and immediateness of data, but it tends to be somewhat inadequate when important aspects of a child's growth process are under consideration. To ignore almost completely the backgrounds of growth in all the areas measured tends to place the basis for comparison entirely within a group of data taken at the same time, with the possibility that all might be the artifacts of the operation of more basic factors. A control on the consistency of the relationships existing in the present data would be a study of the development of these factors through time rather than judgments based on conditions present at a single point in the child's development. Such a possibility is presented in Olson and Hughes' concept of "split growth."

The "split-growth" concept.—From this point of view, reading is as much an aspect of growth as height in inches, weight in pounds,

¹ Marion Monroe and Bertie Backus, *op cit.*, pp. 38-39.

dental age, and grip age. In addition, reading shows the same definite tendency toward unified organization with the complete growth picture of the organism as a whole. This stable, internally consistent, growth picture of the whole child is represented, for purposes of providing a single index, by Olson and Hughes' "organismic age"—an age which is "the mean value of all of the separate ages available for a child."¹ According to these authors the "organismic age" of a child resists displacement and presents a stable picture of the developmental growth of the whole child. This age is superior to previous attempts to provide a base for comparative analysis of single aspects of the child's development in that it meets the two criteria suggested for such points of reference, namely, (1) derivation from a broad cross-section of the child's development and (2) possibility for study of the direction of development through observation of this cross-section over a period of time.

The child's reading age may now be compared with the "organismic age," relatively in regard to a single point in growth and longitudinally as to direction and rate of growth in time. This last comparison provides the real advantage of this type of analysis. The reading age might be lower than the other areas of development when examined at a single point, but further examination of the relative growth picture over a longer period of time might bring out the consistency of both relative placement and uniformity of reading growth in relation to all the phases of development. Under these conditions there would seem to be no reason to single out a child for specialized attention in reading. On the other hand, if this longitudinal examination of growth in reading should indicate that the reading was "splitting away" and slowing down in the general trend of its development while all other indices proceeded at the same rate, the child would be a legitimate candidate for special training in reading. Some factor in the reading process would be operating specifically to cause the reading age to split away from the rest of the development ages. This emphasis on the importance of comparing growth in reading ability with the aspects of the child's growth

¹ Willard C. Olson and Byron O. Hughes, *op cit.*, p. 1

makes a real contribution to the present thinking on the problem of selecting children in need of reading instruction.¹

All the information needed to make this study of development either is available or is easily obtained in every school situation. Tables for translating height, weight, eruption of permanent teeth, and strength of grip into age equivalents may be obtained from W. C. Olson at the University of Michigan.² Mental ages, achievement ages of different kinds, and chronological ages either are a part of the regular school records or may be derived from the use of intelligence and achievement tests. From these, the general index of growth (organismic age, or the mean of all the ages considered) can be readily determined, and the comparison of this age with the reading age can be made. The real contribution of this procedure is lost, however, unless a graph of these ages is kept over a period of time in order that the relative position of the different ages and the direction and rate of their growth may be studied. This fact implies that this procedure cannot be used successfully unless systematic records have been kept for all children in the school in order that data for this analysis may be available when needed. It would be impossible to wait months and years for data on the direction of growth before attempting to help a child who is having trouble at the present time. Without this background of information the important aspects of the child's growth cannot be studied, and judgments, however invalid, must be made upon the information available.

The use of the split-growth technique and the previously discussed procedures is open to serious criticism on the score that they practically ignore the personality being considered for reading instruction. The tremendous value of the techniques just discussed seems obvious, but it seems equally important that the information ob-

¹ It is recognized that longitudinal analysis is not restricted to Olson and Hughes' "organismic age" index of development but may be used also with Monroe's reading index and its supporting data. Olson and Hughes' technique has the advantage of a more comprehensive cross-section of development from which to make an analysis.

² Willard C. Olson and Byron O. Hughes, "Tables for the Translation of Physical Measurements into Age Units." Ann Arbor, Michigan: University Elementary School, University of Michigan, 1938 (mimeographed)

tained by these procedures be related to the child and his background of development in society. The recognition of the importance of knowing and understanding the child, as well as studying specific aspects of his growth, has led to the development of the case-study method for selecting children for special training in reading.

The case-study method.—The case-study method has the advantage of not being confined to one technique or one line of attack. As used in the Syracuse University reading clinic, the case study of children makes use of the reading index or "split-growth" technique as merely one stage of the analysis and proceeds immediately to investigation and study of the child's physical, intellectual, emotional, and social development as indicated by reports of parent, teacher, and child.¹ Separate and distinct investigations are made with reference to these three sources so as to check the consistency of the reporting. If the teacher, the parent, and the child all agree on significant items in the case study, the person making the study has some reason for accepting and using this information in the interpretation and the treatment of the child's problems. At the same time the inconsistencies are probably equally important, for they point to different interpretations and understandings of the child and indicate the need for reconciliation of these differing points of view. The greatest advantage of this procedure is that it not only meets the criteria for a cross-sectional and longitudinal analysis but also presents information which helps interpret each stage of the child's growth and indicates significant clues for the determination of probable treatment. It is important to point out, as the previously discussed procedures do, that the child needs additional training, but it is even more essential to understand how the child developed to that point if one is to determine the proper treatment for improving the present condition. The writer believes that a case study, properly made, will repay the teacher for the additional time and effort necessary to complete such an analysis

¹ Case-study forms have been developed in the clinic to cover the major areas of the child's development and to provide means of indicating this development pictorially. These forms may be obtained from Syracuse University Book Store, Syracuse, New York. The price is one dollar for a booklet of all forms.

The case-study technique has been objected to by teachers on the score of the extra time and effort required to use it in the study of educational problems. The point is made also that the numbers of children needing special instruction in reading are so great that no ordinary teacher would ever be able to make case studies of them all, irrespective of the ultimate value of such study to both the teacher and the child. In recognition of this point, it must be admitted that case studies take their toll of the strength and energy of the teacher making them, but in defense of the case-study technique may be raised three arguments which might justify the additional burden on the personnel of the school system: (1) The making of one or two case studies of children in a single room not only gives the teacher understanding of a particular child and his needs but makes the teacher more sensitive to the whole group of children and the different factors which are basic in understanding their present behavior. (2) The case study, properly done, has greater possibility than any other procedure for adequate analysis of child difficulties. (3) The application of any one of the four techniques discussed in the second group would cut down *significantly* these "large numbers" of children needing special reading instruction. The present large groups result from applying external standards to children of widely varying abilities and backgrounds. They are due to the current inclination on the part of many teachers to place in a special reading class all the children who have difficulty in adjusting to the class program. Special reading instruction will not solve *all* the problems of an educational program.

Critical point of reference.—Another important aspect of the problem to be faced, irrespective of technique used, is the difficulty of determining a critical point of reference, a point where on one hand the child is given help and on the other the child is allowed to go on in his various activities without the help of this special training. Actually no definite general answer can ever be made to this problem. This critical point must always be a relative thing based, however, on the best information and research available at the time plus an intelligent consideration of the welfare of the children. No procedure nor technique will ever relieve the teacher or the administrator of the responsibility of making judgments in the light of an

educational philosophy. Each school system will have to determine its own point of reference and examine each case in the light of this point and from the background of its scale of educational values.

SUMMARY

Fundamentally, any sound procedure for determining the need of a child for specific reading training should be based on a comparison of the child's reading development with his development in other significant areas. The significance of the specific areas chosen for comparison depends on the particular educational policy held.

It is suggested that any valid comparison should be based on (1) a cross-sectional inventory of the important developmental areas at a single point in time; (2) a longitudinal study of the trend and the consistency of this cross-sectional inventory over a period of time; (3) an understanding of the relation of this inventory to the unique, dynamic growth history of the personality being studied. While practical demands and inadequacies of personnel may prevent a procedure from going beyond the first criterion, even this step is an advance over customary practices in the schools today.

It should be pointed out that the procedures discussed here are not restricted in application to reading but might be applied to an examination of any specific phase of a child's development.

ORGANISMIC SUPERVISION

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EXAMINATION of available charts of supervisory organization reveals a number of highly significant facts. The learner, the object of primary concern in education, is practically never mentioned as such in the diagrams. Almost always the chart is so constructed as to show the flow of authority from superior to subordinate under various plans of organization, such as the line-and-staff, the co-ordinate, and the dualistic plans, which are described in most textbooks in administration and supervision; the idea of *service* to teachers who are at work with children in the classroom is seldom the primary consideration underlying the plan of organization. What is probably their most important limitation is the failure of these organization charts to indicate in any way the relations between the school and other social agencies in the community that deal either directly or indirectly with the care and the development of the individual. The common assumption apparently is that the school has a peculiar function of its own to perform and that the school should undertake its task as a more or less independent agency.

The significance of these apparent shortcomings is obvious. When attention is focused on machinery of organization, the approach is likely to be from the point of view of administrative efficiency so that authority and responsibility can be definitely fixed. This approach is almost certain to shift the attention of the professional group from the consideration of the needs of the learner to the matter of relationships, professional and otherwise, among members of the staff. As has so often been found in military circles, the definite allocation of authority leads to "passing the buck" and to an unwillingness on the part of the individual to take the initiative in correcting conditions which come under his observation but for which he is not directly responsible. This weakness has, in some places, been overcome by various forms of organizations, such as

councils, committees, and advisory boards, which seldom appear in the chart but which make it possible for groups of responsible officers to get together to consider common problems and to plan methods of solving them. It may also be pointed out that the introduction into the schools of numerous types of service agencies, such as health and guidance clinics, vocational counselors, and libraries, has tended to introduce into organization the ideal of *service* for all rather than meticulous assignment of authority.

The failure of these organization charts to consider adequately the relations of the school and the total community of which it is a part raises a number of fundamental issues. Should the school seek to carry on its program as an entirely independent agency, or should it seek to work actively and co-operatively with other agencies in the community concerned with the care and development of the individual, such as the church, youth organizations, vocational and placement bureaus, welfare agencies, the C.C.C. program, 4-H clubs, and similar educational activities usually conducted in communities by agencies outside the school? Should it be a matter of definite concern to the school that many of the influences of the environment to which the child is exposed may be so unwholesome as to counteract the best efforts of the school, or should these matters be left to other agencies of the community, such as the civic authorities, health department, housing commissions, the courts, service clubs, the numerous kinds of private organizations interested in improving life in the community, and other social agencies?

It seems obvious that steps should be taken in many communities to bring about better co-operation than exists at present between the schools and the many agencies of the community that are in fact either conducting educational programs or carrying on activities indirectly determining the direction and the quality of the development of the youth. The Regents' Inquiry into the Character and Cost of Public Education in the State of New York¹ proceeded on the theory that the characteristics of the educational product afford the best measure of the effectiveness of the work of the school. How-

¹ Francis T. Spaulding, *High School and Life*. The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., Inc., 1939.

ever, there are many who maintain that the characteristics of the youth revealed through his activities in daily life are not the product of the endeavors of the school alone but rather that they reflect the combined influence of the total educational program of the community. Included among these educational agencies are, in addition to the school, the agencies mentioned in the preceding paragraphs, as well as many others, such as the press, the radio, the theater, recreation facilities, neighborhood groups, gangs, industry. When the total effect of these agencies has been constructive and wholesome, the educational product will have characteristics that are almost certain to be more desirable than they will be when the total effect of the combined educative elements of the community has been narrow and unfavorable. Youth reflects in its behavior the total environment to which it has been exposed. The school is only one element in the environment—often not the most effective influence—determining the quality of behavior.

The importance of bringing about a better co-ordination of the programs and activities of agencies in a community concerned with various phases of development is being recognized in many parts of the country. For example, many cities in California¹ have established community co-ordinating councils, consisting of representatives of various interested groups, including the schools, to deal with the problem of juvenile delinquency. The value of this kind of co-ordinated endeavor is clearly revealed by the marked improvement that has taken place when those councils are functioning. A similar community attack on the improvement of many more phases of living conditions in Gravesend, New York, in which representatives of numerous local agencies and organizations participated, has resulted in the reconstruction of life and has changed the locality from an unwholesome, backward, unsanitary place to a healthy, clean, progressive community. In this improvement program the school played an active part. In fact, without the leadership of the representatives of the school, the program might never have succeeded, probably would not even have been begun.

It is being increasingly realized that supervision should be con-

¹ Kenneth S. Beam, *Co-ordinating Councils in California*. Department of Education Bulletin, No. 11. Sacramento, California: State Department of Education, 1938.

cerned primarily with the study of the characteristics of the learner, his strengths and his weaknesses as he progresses through the educational system. When this growth is not what the school as the responsible agent of society believes to be desirable, supervision steps in to determine the reasons for the unfavorable development. Modern organismic psychology has made it clear that the individual constantly reacts to the environment in which he lives, and reacts in ways conditioned by his natural capacities, interests, and needs. The supervisor consequently seeks the reasons for unsatisfactory growth, not only in the school's program or in factors resident in the pupil, but also in the elements of life in the community outside the school that may be contributing to the unfavorable condition. When the reason is judged to be in the school's program or in factors resident in the pupil which are under the control of the school, supervision can readily undertake a program that should lead to improvement. However, when community factors ordinarily outside the scope of the school's influence appear to be at the root of the difficulty, it is often not possible for the school to do much to improve the situation. For example, poor health due to bad housing conditions, inadequate food in the home, or exposure to disease may be one of the reasons why the pupil is not developing in desirable ways. The problem of how to bring about an improvement in these conditions raises questions that have social implications which the school alone cannot manage. For example, the school can do little to provide food or to improve housing. It must seek the assistance of agencies in the community that deal with these matters. When this co-operation is forthcoming, progress can be made. Unfortunately, in many places the various agencies in the community that deal with the many aspects of the total educational program of the locality either do not realize the need of providing for this co-operation or have not taken the necessary steps to bring it about.

The question arises: What steps can be taken to bring about a solution to this difficulty? The chart reproduced in Figure 1 represents an attempt to answer this question. In it are listed what may be regarded as major elements in a community that affect learning. The title "Organismic Supervision" has been selected to define the basis of the organization that the writers have in mind, namely, the provision of some means of making clear what they conceive to be

the broad scope of the total educational program, both formal and informal, as it affects the growth of the individual, and a method of bringing about the co-operation of the numerous agencies found in any community that are elements of this too-often-disorganized program. The chart is the outgrowth of a rather detailed study of conditions in one large middle western city, namely, Minneapolis, Minnesota. Similar conditions are to be found in almost any locality.

An examination of the chart will reveal a number of unique features not found in most organization charts. In the first place, it can be seen that the individual learner is the focus of the chart from or toward which the actions of agencies included in all other parts of the diagram flow. In the second place, the chart makes it clear that there are three major parts into which influences that bear on the learner can be divided: (1) the school, (2) governmental agencies of various kinds, and (3) community agencies, both organized and unorganized. An analysis of each part of the chart will make clear to the reader the various elements that are included under each major heading. In the original study a great many other agencies were discovered that should have a place on such a chart, but lack of space made it impossible to include them. However, those shown are typical and will indicate to the reader what the writers have in mind. The reader will find it an enlightening as well as a revealing undertaking to make a study of his own community and to make a similar classification of local agencies. At the same time he should consider the ways in which these agencies now work together and whether or not steps should be taken to improve the situation. In the chart the arrows between the major parts are intended to point out the co-operation that is desirable.

The writers struggled for a long time with the problem of means that can be used to bring about effective co-operation between all the major educational agencies of a community. Few constructive suggestions along this line were found in printed sources. It is obvious that the chief executive of a locality can facilitate co-operation by bringing about an administrative organization that will insure the efficient working together of governmental agencies. On occasion this organization might be expanded by bringing in representatives of lay groups concerned with special problems. The danger

that selfish or political considerations may enter in to distort the program must be given careful consideration. It may also be possible to develop a co-operative program through the joint efforts of representatives of a number of existing agencies, such as government, lay groups, and the schools, to deal with particular questions.

In the judgment of the writers, the approach that would be most likely to succeed would be an extension of the idea of the co-ordinating council developed in California, which would provide for the organization of a council on education to consist of key members of major groups concerned with the improvement of all phases of living in a community. This plan was recently suggested in a sense by Superintendent Campbell, of New York, who proposed the organization of a "Ministry of Youth" to deal with these problems in New York City. The plan that the writers have in mind is shown on the chart by the large outer circle, which is intended to indicate the desirability of bringing about a co-ordinated, co-operative attack on the problem of improving the total educational program of any community.

The method of organizing such a council on education should be determined by conditions in each locality. In some places the board might be appointive; in others it would consist of delegates from interested organizations; in others it might be elective. Experience with such programs would lead ultimately to the discovery of the best methods of organizing and conducting such a council. The primary consideration should be to develop the attack through democratic procedures which will eliminate any danger that education may fall into the hands of some highly centralized authority which may in fact misuse the educative process. In various countries the undemocratic, totalitarian form of government has used education as a tool and has developed a program that has led to what appears to many to be an actual perversion of the true function of education. The participation in a co-operative, democratically organized community program by all groups concerned should result in making increasingly clear to them the nature of the problem of improving the environment and the fact that the solution of the problem can be assured only by the subordination of selfish interests to the interests of all.

THE ORIGINS OF PROGRESSIVE EDUCATION

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IN 1919 a small group of educators and other persons interested in bringing to a focus the then scattered attempts at educational reform being made in various parts of the country organized the Progressive Education Association. According to Stanwood Cobb, one of the founders of the association, it was decided, after hours of discussion, to call the new organization the Progressive Education Association because the term "progressive" would prove provocative and yet would be soundly descriptive of the principles for which it was established.¹ The implication of the statement of Cobb is that the term "progressive" as applied to the new education was not in common use at that time. He characterized "progressive education" as a forward movement toward greater freedom and interest and joy in school life and as an alliance between the sciences and idealism, the expression of a new attitude toward childhood and youth. Freedom, interest, sympathy, trust, health—these are the essentials, he states.

What does the term "progressive" mean? According to the *Century Dictionary and Encyclopedia*, "progressive" carries the meaning of "favoring progress; using one's influence or directing one's effort in the line of advancement or improvement: as, to be *progressive* in one's ideas about education," and it also refers to "one who promotes or commends reforms or changes: opposed to *conservative*." To one who is familiar with the early literature pertaining to the purposes of the Progressive Education Association, this connotation of the term is aptly fitting.

A study of educational literature of the nineteenth century will show that the term "progressive education" has had a long and

¹ Stanwood Cobb, "The Romance of Beginnings," *Progressive Education*, VI (January, 1929), 66-73.

interesting use. In 1828 Mme Necker de Saussure published the first two volumes of a work setting forth her theory and ideas about education.¹ So important was her book thought to be that it was recognized by the French Academy in 1832.² The principles of education set forth by Mme Necker have a striking resemblance to those professed by the Progressive Education Association.

The principle of *freedom to develop naturally* was advocated by the Swiss educator. She maintained that, within limits, the more a child is left to himself and his normal surroundings, and the less his natural mental tranquillity is disturbed, the better it will be for him. Like Rousseau, she believed that education must co-operate with nature in the development of the child as the gardener co-operates with nature in the development of the tender plant. Senses, intellect, will—all alike are present from the first, and all must progress concurrently.

The principle of *interest as the motivating influence* was strongly stressed by Mme Necker. She warned against intruding too roughly and too readily on the child's mental life and against interfering with his interests or exercise of the imagination. Rather, a chance should be given him to exercise his scope for invention and creative activity. She pointed out that children are interested in everything they see and that they wish to take a part in it in order to understand it. If they are isolated from life or denied the opportunity to pursue such interests, they will miss many educational advantages which cannot be otherwise supplied.

The principle of *guidance and leadership as the function of the teacher* is one of Mme Necker's much stressed principles. She went to some length to point out that children must be led rather than compelled to do things. To succeed in the act of leadership, one must exercise tact, set a worthy example to be followed, and love and understand children. As a guide, the educator must keep careful

¹ Mme Necker de Saussure, *Education progressive*. Paris: Garnier Frères (*Progressive Education*). Translated from the French by Mrs Willard and Mrs. Phelps. Boston, 1835.

² H. C. Barnard, *The French Tradition in Education: Reminiscences of Mme Necker de Saussure*, p. 262. London, England: Cambridge University Press, 1922.

This work has been drawn on heavily in support of statements with regard to Mme Necker de Saussure.

watch and be ready to give the child help, advice, and encouragement when needed.

The principle of *intelligent study of pupil development* was regarded by Mme Necker as indispensable to the formation of a sound plan of education. Her contribution to the formulation of this principle caused Barnard to credit her with being the forerunner of the modern, widespread, scientific child-study movement. Munroe also recognized her contribution to the development of this principle: "She pursued that study in so scientific a way, her reasoning is so judicial, she was so little carried away by theories or influenced by preconceived opinions, that she forms one of the safest of guides in this important branch of investigation."¹

Attention to health and physical growth as a principle of education was recognized by Mme Necker. She maintained that from the outset education must concern itself with every side of the child's being. She recommended the keeping of a dated journal of the child's physical, intellectual, and moral development. She urged that some time be set aside each day for bodily exercise of some rigor and in the open air if possible. She favored establishment of playgrounds where games and exercises could be engaged in under competent supervision.

The need of *co-operation between school and home to meet the learner's needs* is an educational principle which Mme Necker recognized. In fact, her book was addressed to both parents and educators, and it is difficult at times to discern for whom she intended her remarks.

Space does not permit pointing out several other ways in which Mme Necker's *Progressive Education* is similar to modern progressive education, nor does space permit the pointing-out of some differences. Suffice it to be said that the similarities are more striking than the differences. The roots of modern progressive education reach down to Rousseau, and so did Mme Necker's. Her educational theory had so many points in common with Rousseau that Compayré was led to say: "A native of Geneva, like Rousseau, Mme Necker de Saussure has endowed French literature with an educational masterpiece, which for elevation of view and nobleness of

¹ James Phinney Munroe, *The Educational Ideal*, p. 216. Boston. D. C. Heath & Co., 1895.

inspiration, can take rank by the side of *Emile*.¹ He admitted that she undeniably owed much to Rousseau, although she was far from always agreeing with him. Compayré stated that she borrowed from Rousseau the fundamental idea of her book, the idea of a successive development of the faculties, to which should correspond a parallel movement in educational methods; but she did not believe that the child's development takes place in the particular order that Rousseau maintained.

The question may be asked: Why did Mme Necker call her treatise on education "progressive"? Barnard says:

As the title of her treatise indicates, Mme Necker de Saussure takes up the standpoint of what would nowadays be called genetic psychology. Doubtless she borrows the principle from Rousseau, but in her application of it to education she shows a far juster appreciation of facts than did her predecessor. The author of the *Emile* had divided progressive—or, as he termed it, "successive"—education into three clearly marked periods.²

The phrase "The Progressives of the Seventeenth Century" was used by Karl von Raumer³ about the middle of the past century. He used the term to denominate those who sought to introduce new principles and ideas into pedagogy. Among those so designated were Ratich, Comenius, Locke, Rousseau, Basedow, and Pestalozzi, because they had something of a common character in principles and tendencies.

Von Raumer described them somewhat as follows: (1) They vigorously opposed "the systems of education and instruction prevailing in their day," calling such methods "vain, lifeless memory-cramming." (2) They offered new methods which would conduct the student forward "by a plain, short, and easy way, to the attainment of his end." (3) "They aimed at imparting life to instruction by calling into action the understanding of the child in proportion as they omitted the drilling of memory." (4) They said that, since their "new methods were conformable to nature, the children will learn, voluntarily, with ease and pleasure." Therefore "all punish-

¹ Gabriel Compayré, *The History of Pedagogy*, p. 494. Translated by W. H. Payne. Boston, D. C. Heath & Co., 1886.

² H. C. Barnard, *op. cit.*, pp. 262-63.

³ "The Progressives of the Seventeenth Century (Translated from the German of Karl von Raumer)," *American Journal of Education*, VI (March, 1859), 459-66.

ments, corporeal ones especially, will cease of themselves." (5) "They set great value upon real studies." (6) They emphasized bodily exercise. (7) "Some of the progressives would have had each scholar taught according to his individual peculiarities and gifts." (8) "With some of the progressives of the eighteenth century there appeared a distinct form of Pelagianism. The problem of the educator, according to them, was only this: to promote the vegetative development of the natural good endowments of each child, after the fashion of a gardener, so that the inborn *potentia* may ripen into *actus*. *Naturam sequi* is their principle."

It is evident that there are many points of similarity between the principles of education advocated by Karl von Raumer's so-called "Progressives of the Seventeenth Century" and modern progressive education.

At the turn of the present century the term "progressive education" appeared in two British periodicals.¹ Because the principles of education advocated in these articles are not fully stated, it is difficult to say whether the term was used in exactly the same sense as at present. A third article by a British writer of the same period uses the term "progressive schools" as descriptive of institutions which used *reformed methods*.

This reform in the methods of instruction . . . means a change in point of view from which the whole process of learning is regarded. . . . The principle of normal growth is being substituted for that of artificial culture. . . .

The prime necessity is that the master should regard his work as that of helping the boy to grow by means of widened interests, of more vivid realization, and of directed self-activity.²

From the tenor of the last article it seems quite clear that the writer had in mind progressive-education principles, and there is good reason to believe that the writers of the other two articles had in mind at least some of the principles of modern progressive education.

In America the movement culminating in the organization of the Progressive Education Association in 1919 is alleged to have had

¹ a) "Progressive Education," *Nature*, LIX (January 5, 1899), 235-38.

b) "Progressive Education," *School World*, IV (April, 1902), 140-41.

² H. Bompas Smith, "Methods of Teaching—The New and the Old," *School*, II (August, 1904), 53-55.

its origin in the work of Colonel Francis W. Parker, who from 1875 to 1902 was an aggressive champion of improved methods in elementary education in the United States. An ardent believer in the principles of education formulated by Rousseau, Pestalozzi, and especially Froebel, Parker did much toward breaking down the formalism and the subject-matter dominance in the educational thinking of his time and in securing an adoption of the Froebelian practices in elementary-school work.¹ Parker's emphasis on the importance of motor expression and on the recognition of the child's own desires, interests, and emotions as basic factors in learning, and his protests against mechanical drill, *memoriter* methods, and routine came to be known as the "new education fad."

The "new education fad" took root in both the thinking and the practice of many educators and came to be commonly referred to in educational literature as the "new education movement." While the social element in education had been strongly emphasized by Colonel Parker, it was the leadership of John Dewey that brought about the most revolutionary changes in educational theory and practice. Doughton says: "It is to John Dewey that most credit is given for initiating the really modern movement in education."² He says that, because of Dewey more than anyone else, progressive education has accepted as a function of the school that it shall serve as a laboratory where the child can conduct himself as an experimentalist. Dewey has also done much to point out the implications of psychology and biology for progressive education.

Just exactly when the term "progressive" began to be applied to the "new education movement" in America is not easy to say. In 1912 Parker used the terms "progressive school" and "progressives" in designation of those who accepted Froebel's fundamental educational principles but did not consider it necessary to follow his particular devices, as contrasted with the followers of Miss Blow, who believed it necessary to follow Froebel's particular devices.³ Parker

¹ Samuel C. Parker, *A Textbook in the History of Modern Elementary Education*, p. 471. Boston: Ginn & Co., 1912.

² Isaac Doughton, *Modern Public Education*, p. 607. New York: D. Appleton-Century Co., Inc., 1935.

³ Samuel C. Parker, *op cit*, p. 457.

associates John Dewey with the progressive group by giving him credit for demonstrating the impossibility of the symbolism of Froebel and for pointing out the desirability of making school activities really representative of current life.

McMurry¹ in 1914 used the term "progressives" as descriptive of those associated with reform movements advocating radical changes in educational practice.

Scott Nearing gave the title *The New Education: A Review of Progressive Educational Movements of the Day*² to a book published in 1915. His use of the term "progressive" in the title of his book seems to be synonymous with the "new education" (the term he used throughout the book) rather than with the present concept of "progressive."

John Dewey³ in a book copyrighted in 1916 includes a chapter entitled "Education as Conservative and Progressive." He used the term "progressive" for the theory that education is a constant reorganizing or reconstructing of experience which adds to the meaning of the experience and which increases the ability to direct the course of subsequent experience.

Summary and conclusion.—From the evidence presented it should be clear that the term "progressive education" is not to be associated only with the advent of the Progressive Education Association. Various persons have used the term at different times and not always with the same specific meaning. It has been used to designate a theory and method of education based on principles set forth by Rousseau. The term "progressive" has been used in a general sense to denominate educational reformers who protested against methods of instruction which they regarded as vain, memory-cramming, formal, and utterly out of keeping with the natural development of children and who therefore offered substitute methods calling into action the understanding of children, eliciting their interests, and imparting life to instruction. The new education movement in Amer-

¹ Charles McMurry, *Conflicting Principles in Teaching and How To Adjust Them*, pp. 261-67 Boston, Houghton Mifflin Co., 1914.

² Scott Nearing, *The New Education: A Review of Progressive Educational Movements of the Day*. Evanston, Illinois: Row, Peterson & Co., 1915.

³ John Dewey, *Democracy and Education*. New York: Macmillan Co., 1916.

ica was described as "progressive" by various writers. Dewey used "progressive" in a more specific sense as denoting his own theory that education is a constant reconstruction of experience. Since 1919 the term has come to be associated with the purpose and the principles of education professed by the Progressive Education Association, which at the outset regarded itself as a forward movement maintaining that education should be based on such principles as "freedom to develop naturally; interest as the motivating influence; guidance and leadership as the function of the teacher; intelligent study of pupil development; attention to health and physical growth; and close co-operation of school and home to meet the learner's needs."¹

Despite a century of use, the term "progressive" as applied to education has been employed in a sense generally consistent with the definition given earlier in this treatise. During that time "progressive" has been used consistently as indicative of efforts advocating reform of educational methods and practices so that they will be more in keeping with the natural development, needs, and interests of children than are formal and conventional practices so common in schools. Those who use the term, whether or not they be members of the Progressive Education Association, should be especially careful not to include under the term "progressive education" principles or practices inconsistent with the meaning established by long usage.

¹ Frederick G. Bonser, *Life Needs and Education*, p. 10. New York. Teachers College, Columbia University, 1932.

THE SCHOOL LOOKS AT THE NONREADER^{*}

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A STUDY of the case histories of forty pupils who because of reading failure were sent to the diagnostic school of the San Francisco public-school system gave in perspective a synopsis of the changes in personality, behavior, and social adjustment that occur in nonreaders, the attitude of school authorities toward them, and the outcome when they are taught to read. These pupils possessed normal intelligence or above, normal English vocabularies, and no noticeable physical defects.

Each case history contained (1) a sheet, filled in by one of the thirty-two school principals involved, showing the nature of the problem, giving a picture of the personality and conduct of the child, both favorable and unfavorable, stating the probable causes of the given condition, and recommending steps needed for improvement; (2) a physician's report on the child's physical condition; (3) the results of mental and performance tests; (4) a social worker's summary of the home and social life, along with other pertinent environmental factors; (5) reports of the interviews of a psychiatric social worker with parents, relatives, child, and social agencies; and (6) a report concerning the child, his personality, behavior, and work as observed (without knowledge of previous records) by the diagnostic schoolteacher, an understanding woman of exceptional teaching ability. Progress notes were included.

From the study of each case a page summary was prepared to give as clear a picture as possible of the child's personality as expressed in each of the three worlds in which his life revolves—home, school, and the world outside both home and school—and an estimation was

^{*} This study has been supported by a grant from the Child Neurology Research of the Friedsam Foundation. It has been conducted under the sponsorship of the Department of Pediatrics and the Division of Neuropsychiatry of the Department of Medicine of the School of Medicine of Stanford University at San Francisco, California.

made in general terms of the degree of security experienced in each. When the cases were arranged according to the number of years of failure, from one to nine (usually with promotion regardless of accomplishment), a fairly definite pattern seemed to evolve in changes of attitude, of social adjustment, and of conduct as the long years of failure mounted with the accompaniment of disgrace and opprobrium.

CHANGES IN ATTITUDES

When, on starting to school (the first big step into the outside world), the child who had previously won a place as the equal or the superior of his fellows found himself an inferior and a failure no matter how hard he tried, he would be expected to exhibit the attitudes of bewilderment and embarrassment, with emotional settings of deprecation or protestation, which the principals reported in this first stage. In the second stage the forty-two terms used by the principals showed that, as the position of being a scholastic inferior became still more unendurable, a need was felt to gain recognition in some attention-getting way, which apparently satisfied for a time and served as a refuge in times of derision. Since, however, the child still occupied the place of a simpleton, there was aroused, in the third stage, a continually growing antagonism, expressed by fifty-one terms such as "sulky," "balky," "resentful." Nor was it long before this antagonism was tinged with desire for revenge, even animosity, because of the child's being considered a fool by his teacher and classmates; and in the fourth stage he was described by such words as "mean," "hateful," and "spiteful." In the fifth stage, after the child had spent months or years of going through the motions of learning to read and meeting with no further results than wretched failure, condemnation, and repression (in order that the progress of the successful classmates might not be interfered with), a beginning disintegration of the personality could be traced, which was detectable along four main lines:

1. There was a lowering of the standards necessary for mental achievement, which was complained of by the school officials in tones of exasperation as if most of them had thought the lowering wilful and had treated it as such. It would obviously seem impossible for a child to maintain interest, attention, application, concentration, and

co-operation in a school subject in which he is merely a miserable onlooker, prodded and mortified day after day and year after year to exhibit his stupidity in the presence of his rivals.

2. A sense of self-depreciation, described as "lack of initiative," "lack of self-confidence," "lack of responsibility," and the like, accompanied and succeeded the lowering of standards.

3. Bodily reactions to failure, comparable to the mental reactions, were noticeable as months and years dragged by without ability to participate in any class activities connected with reading. These were indicated by (a) lowering of the body tone, especially in posture; (b) inhibition of normal activity, described as "acting tired," "lethargic," "slow," "sluggish"; or (c) the opposite, overactivity, described in such terms as "jerks," "very restless," "overwrought," and a "bundle of nerves."

4. In the pupils of submissive temperaments there developed withdrawal from the reality that they could not face and still save their self-respect, while in those of aggressive makeup antisocial attitudes were found. In their incipient retreat into an unreal and more pleasant world within the mind, pupils were complained of as "sitting and staring vacantly," "not listening," "being absent-minded or very forgetful." To describe a later stage of the retreat, principals used fifty-eight terms such as "dazed," "queer," "tragic," "secretive," "dejected," "moody," and "abnormal." In only two subjects did similar attitudes occur at home. Thirty-eight per cent of the pupils had reached the stage of sitting inertly and doing no work whatever—an inhibition of both mental and physical activity.

The loss of the use of mental power from the inhibiting effect of failure was clearly shown in every case in which a Binet mental rating had been given more than once. The second rating in this series was invariably lower by from seven to thirty-one points, the average decrease being fifteen points. For sixteen cases the numbers of points lost were as follows: 7, 7, 8, 9, 10, 10, 11, 12, 12, 13, 15, 17, 18, 28, 28, 31.

CHANGES IN SOCIAL ADJUSTMENT

Since success in life depends, in large part, on ability to adjust one's self to others and to work with them, changes in social adapta-

tion were studied in the cases of these children who had been treated as normal for the first six years of life and then, for reasons not understood by them, found their status lowered in school to that of subnormals whose weaknesses were exhibited and commented on unfavorably and impatiently in the presence of their rivals for success and for the approval of the presiding authority. They lost faith in their own abilities, and the group of other pupils and the teacher remained as possible causes of the mortifying position. Suspicious of the group and wondering if its members were "putting something over," the victims commonly would first get even by annoying the other pupils or interfering with their work. Obtaining no improvement from these tactics, 38 per cent of the failing pupils finally turned away from their school playmates, unable to mix with them socially. Next, distrust extended to the teacher, first shown as antagonism, which was later tinged with revenge. Finally, the failing pupils became overtly antisocial.

The principals reported that only 13 per cent of these pupils made satisfactory social adjustments at school; 30 per cent showed hostility; 10 per cent were revengeful and unable to mix socially; 20 per cent did not mix at all; and 20 per cent had become distinctly antisocial. (Three records, 8 per cent of the cases, were incomplete.) In contrast to this discouraging state of affairs, investigation of the home environments disclosed that there 65 per cent of the pupils, instead of 13 per cent, had made at least satisfactory adjustments (half of them, excellent adjustments). Twenty per cent had attained a fair degree of adjustment; 5 per cent, a little; and 7 per cent, a poor degree of social security. (For one pupil there was no report.)

In the understanding, helpful atmosphere of the diagnostic school, where these pupils were really learning to read, still another picture was presented. Sixty per cent gave no trouble whatever in their social relations. Seven per cent were hostile at first, but, because no rivals were present and all were working to overcome their handicaps, two lost their hostility. Twenty per cent were unable to mix at first, but half of these improved greatly during their stay for diagnostic study and none were overtly antisocial. Thus the theory that social security is fostered by passing pupils along when the necessary foundations for other school grades have not been gained (and

grades are still with us) may be seriously questioned. In this study the social adjustment in 87 per cent of the cases investigated was reported as becoming increasingly unsatisfactory at school year by year, but the maladjustment largely disappeared with success in learning to read.

CONDUCT CHANGES

This section describes changes exclusive of social adjustment of individuals. In the first year misbehavior was sporadic and impulsive, as if the frustration in the use of innate capacities had suddenly culminated in small infractions of the code of school behavior. By the second year of failure the sense of injustice apparently flared up more frequently within the pupils, and minor violations of school rules increased. With this feeling of injustice came an awareness of the danger of being relegated to the depths of insignificance, and lively splashings in the quiet school waters took place regardless of consequences, disapproval being preferable to no attention whatever, particularly if the means used to obtain attention aroused in classmates a shocked amazement at such temerity.

By the third year of failure, as content subjects demanding reading ability were added to the curriculum, all failing pupils were struggling desperately to keep from being submerged and having their school heads held under the water level of school success. The methods adopted were fighting, disobeying, showing temper, and the like. From the fourth year of failure on, the same parting of the ways was found in conduct as was found in social changes. The pupils with submissive tendencies gave up and retreated from the shameful reality, which they no longer had courage to face, into a world within their own minds, a world filled with fascinating fantasies, such as being a hero admired by all or wielding power as a leader over classmates.

The pupils with more aggressive tendencies (43 per cent) gained compensatory satisfaction through careers of open defiance, which extended by degrees to embrace any and all authority and which were often later reinforced by the herd approval of a gang. This reaction was illustrated by such misconduct as stealing, truancy, insolence, cruelty, cheating, swearing, smoking, breaking all laws, and sex offenses. The greater part of this misconduct cleared up when

the pupils were taught to read. Here the conclusion must be drawn that in the long run, when pupils of normal or higher intelligence are not taught the work of each term but are promoted only to "save face," inferiority and antisocial feelings become intensified to an unbearable degree because of the realization that the position of sub-normals is inescapable for them during the remainder of their school lives.

SECURITY AND CHANGES IN ATTITUDES, SOCIAL
ADJUSTMENT, AND CONDUCT

These changes were found to be modified by the degree of intelligence possessed by the child and the degree of security found in the home. Social security is also an influential factor. It was discovered that the higher the intelligence, the more intolerant the child was of the ignominy of failure and the greater the rebellion or the shut-in effect. Dull children, always accustomed to lower planes of accomplishment, did not react with the intensity shown by those of greater mental endowment. Since, as demonstrated above, one effect of continued failure is a resultant lowering of the intelligence quotient, that is, an inhibition of the use of mental power in varying degrees, it would follow that the intelligence quotients mentioned are probably lower than the native endowment that they are supposed to indicate.

Home insecurity, as would be expected, proved to be more devastating in its effects than a lowered estimation in the eyes of the child's fellows in the neighborhood, although both are important in maintaining a well-balanced personality. An exception to the buffer-like, protective effect of home security against the undermining ravages of school insecurity occurred during the first year or two of reading failure. The cause of this exception seemed to be that the child, accustomed to an unusually high degree of security in home and social life during the preschool years, could not reconcile the sudden reversal of position from satisfaction to misery; from victorious to futile efforts; from approval to disapproval, scorn, and ridicule.

Though all intelligent parents find it difficult to accept reading failure in their offspring, because to them such failure connotes mental deficiency, the oversolicitous parents were the most non-

plused and chagrined over the failure of their children, who had hitherto been considered almost perfect. These parents became emotional, critical, and fault-finding, especially when the failure of the school to accomplish the task that it had set out to do was followed by their own failure to teach the children to read. Their failure proved to them the guilt of the children who were "bright and could learn to read if only they would try hard enough," and the parents believed that the disgrace necessitated punishment and deprivation of privileges instead of the usual love. This bewildering change caused in the child a state of deep distress, with which he was unable to cope beyond withdrawal from such unbearable realities or rebellion at the injustice of such treatment.

In 70 per cent of the cases of pupils who had failed in reading, there was a record of having been nagged, punished, ridiculed, or scorned at home, this treatment extending at times to persecution in varying degrees for bringing disgrace on the family name, especially when the parents, in despair, tried to take on the role of teacher, with disastrous effects on the child, the parents, and the peace of the home. Thus the degree of security that children should feel in their homes was unmistakably lowered, in half of the cases seriously, because the school had not taught these pupils to read.

OUTCOME OF DIAGNOSTIC STUDY AND PLANS

Of the forty reading failures investigated, 5 per cent had left the city before the study of their cases had been completed; 78 per cent learned to read satisfactorily (some well and some merely up to grade); 13 per cent achieved fair reading ability as far as they could be followed; and 5 per cent had acquired the necessary foundation and were beginning to read before they disappeared. One pupil, because individual instruction was withdrawn too soon, lost the good start that he had made.

There was no mystery about the results achieved, although three conditions seemed absolutely essential before reading techniques could be acquired. (1) These pupils were not taught by any single method but by the best of any method which was found to be suitable for each case, whether it included phonic, kinaesthetic, or other means of teaching. In other words, allowances were made for individual differences in learning. (2) No child was forced to go any

faster than the pace at which he could master the necessary basic steps. (3) Most important and difficult, the paralyzing inhibitions that blocked all mental activity as soon as the word "reading" appeared in consciousness had to be broken down and a receptive attitude established. The stage was not set consciously for this result, but the heaven began to work as soon as the unfortunates were made to feel welcome in the classroom, to feel that they were really wanted, that everyone was looking for ways to help them, that nobody blamed them for their predicament, and that all made allowances for possible contributing factors. This attitude was such a radical change from their former situation, in which they had been regarded as something between nuisances and criminals, that many could not believe it was not a false front. The atmosphere conferred by the attempt of all pupils present to overcome a handicap was contagious. Then, as pride of accomplishment overcame tendencies to backslide, the results became most gratifying.

Reading success was not the whole of the story. As school security improved and the victim of reading failure could hold up his head as an equal of his classmates, the previous suspicious, resentful, and revengeful misbehavior dropped off, including even stealing and truancy, and better social relations ensued at school; social security improved along with school security. Moreover, when the family discovered that it was not being disgraced by subnormal school actions, the child was reinstated as a normal member, pressure was removed, reproaches and reviling gave way to approval and praise, and the home security of the child was raised to a comforting degree. Thus correction of the reading inability raised not only the school security but the social and the very important home security as well. In the few cases in which the home situation was too serious to change, the children seemed to gain a staying force from their newly found school and social securities—a resiliency, so to speak, that enabled them to withstand the strains and the stresses in the home.

ATTITUDE OF SCHOOL AUTHORITIES

Toward these failures four of the thirty-two principals had adopted an understanding attitude. These principals stated plainly that the school failure had altered the personalities and the conduct of the pupils. However, the other twenty-eight principals and their

teachers were, for the most part, impatient, exasperated, intolerant, and condemnatory. Their course of throwing the blame entirely on the child and his home could not be supported on investigation and was disproved when the pupils learned to read. In many cases an isolated fact or two about the home conditions had been heard of and, without knowledge of other compensating factors, brought about a judgment against the home. It is unfortunate that no way has been found for the school to obtain a better understanding of the home lives of pupils living in strata of society different from that of the teaching profession, not only for the sake of better evaluation of facts but also for an understanding of forces molding the child's personality which vitally affect the ultimate aim of education.

The low mentalities complained of turned out to be intelligence quotients of 87, 91, 96, 99, 102, 103, 107, and one of superior rating. The poor physical conditions said to be at the root of the trouble were not found by the examining physicians, while only two of the seven auditory and visual defects complained of could be substantiated. Neither could be verified the aphasia, psychopathic tendencies, mirror-writing, nervous shock, frail mind, and other factors that had been blamed. Obviously, in most of these cases the school authorities—teachers and principals—had been tragically ignorant of the real difficulties that the pupils were experiencing.

SUMMARY

After thirty-two schools had looked at their nonreaders of normal mentality and found that, although these pupils had become badly adjusted in school, home, and social life, they were unable to help in readjusting them, another school (one in which skilful techniques in *beginning* reading were used) looked at these same nonreaders and made satisfactory readers of 78 per cent of them and fair readers of 13 per cent, not by the use of one method alone but by any and all methods applicable. As a result these erstwhile failing pupils were helped to overcome the maladjustments which arose from the non-reading.

As a preventive measure, a plea is made for special training for teachers of *beginning* reading that they may become masters of the art of teaching the subject no matter what individual differences in the learning process are encountered.

SELECTED REFERENCES ON PUBLIC-SCHOOL ADMINISTRATION. II

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THE January number of the *Elementary School Journal* presented selected references on general administration, state school administration, city school administration, and supervision. The references presented in this article are concerned with teaching staff, school finance, business management, and public relations. The period covered in the selection of the references is November 1, 1938, to October 31, 1939.

TEACHING STAFF¹

60. BIMSON, OLIVER H. *Participation of School Personnel in Administration*. Lincoln, Nebraska. Oliver H. Bimson (assistant superintendent of schools), 1939. Pp. xii+118.

An evaluation of suggested principles of school administration which were assembled by the author from an extensive survey of the literature of this field.

61. CHAMBERS, M. M. "Legislation Touching Teachers," *Nation's Schools*, XXIV (September, 1939), 74, 76

Summarizes recent legislation enacted in the several states concerning changes in certification laws and new stipulations regarding teachers' contracts, salaries, and retirement.

62. COOKE, DENNIS H. *Administering the Teaching Personnel*. Chicago: Benj. H. Sanborn & Co., 1939. Pp. xiv+348

A comprehensive treatment of major problems pertaining to teaching staff, with emphasis on the human factors involved.

63. *Critical Analysis of Teacher Tenure Legislation*. Washington. Committee on Tenure, National Education Association, 1939. Pp. 32

On the basis of a critical analysis of present tenure legislation and its operation, principles are suggested for the formulation of new legislation

64. DAVIS, HAZEL "Nation-wide Salary Situation," *Nation's Schools*, XXIV (October, 1939), 23-25.

¹ See also Item 455 (Pittenger) in the list of selected references appearing in the September, 1939, number of the *Elementary School Journal*

Urges improvement in the quality of teaching as a means of raising the prestige of the profession and of securing public support for placing salaries on a professional basis.

65. EELLS, KENNETH W. "Measuring Teacher Load," *Nation's Schools*, XXIII (February, 1939), 49-51.

Illustrates the application of the Douglass formula in accounting for variable factors in measuring teacher load. Norms are shown for teachers and groups of schools, based on reports from 4,502 teachers in 200 schools included in the Cooperative Study of Secondary School Standards.

66. ELSBREE, WILLARD S. *The American Teacher*. New York: American Book Co., 1939. Pp. x+566.

Traces the development since Colonial times of teacher preparation, methods of teaching, supervision, and various factors pertaining to teacher welfare.

67. ELSBREE, WILLARD S., and SYKES, EARL F. "Single Salary Schedule," *Nation's Schools*, XXIII (June, 1939), 53-55.

A report of a study of policies and practices in twenty-two cities with populations of thirty thousand to sixty thousand which use single-salary schedules.

68. HERRICK, JOHN II. "Staff Personnel Practices in Ohio School Districts," *Ohio Schools*, XVII (April, 1939), 180-81.

A summary of the findings from an investigation of existing policies for dealing with staff personnel problems in 405 cities, villages, and districts of Ohio.

69. *Progress and Problems in Equal Pay for Equal Work*. Washington: Committee on Equal Opportunity, National Education Association, 1939. Pp. 30.

Report of a study on the status of salary inequalities among teachers on the basis of (1) level taught, (2) sex, and (3) race.

70. *The Rural Teacher's Economic Status*. Research Bulletin of the National Education Association, Vol. XVII, No. 1. Washington: Research Division of the National Education Association, 1939. Pp. 1-62.

Report of a survey of rural teachers in twenty states in 1936-37. Presents data regarding (1) professional status; (2) family responsibilities and living conditions; (3) transportation facilities; (4) cultural, recreational, and economic opportunities; and (5) financial status, including salaries.

71. *Salaries of School Employees, 1938-39*. Research Bulletin of the National Education Association, Vol. XVII, No. 2. Washington: Research Division of the National Education Association, 1939. Pp. 67-96

Summarizes the findings of a survey of salaries paid to all types of school employees during 1938-39 in 1,850 cities.

72. SCHELLHAMMER, FRED M. "It Takes More than Pedagogy," *Nation's Schools*, XXIV (September, 1939), 62-63

Asserts that superintendents look for personality in the applicant for teaching and that teacher-training institutions do not give enough consideration to such factors as appearance, speech, conduct, social traits, and culture.

73. SCOTT, CECIL WINFIELD, and REED, CALVIN H. "Salaries and Turnover," *School Executive*, LVIII (August, 1939), 26-27.

A report on trends of salary and turnover of educational workers in public high schools of Nebraska from 1925-26 through 1937-38. The results indicate a positive relation between salary and turnover.

74. "Supreme Court Decisions on Tenure," *Journal of the National Education Association*, XXVII (November, 1938), 241.

Explains basic differences in two apparently contradictory decisions made by the United States Supreme Court on protection to teachers by tenure laws in New Jersey and Indiana.

75. *Teachers in Rural Communities*. Washington: Committee on the Economic Status of the Rural Teacher, National Education Association, 1939. Pp. 128

A report of study of income, expenditures, living conditions, and cultural opportunities of eleven thousand rural teachers in 1936-37.

SCHOOL FINANCE¹

76. BROWNELL, S. M. "Shall It Be 'Yes' or 'No' on Federal Aid?" *School and Society*, XLIX (May 27, 1939), 668-71.

Discusses seven questions pertinent to current proposals for federal aid for schools.

77. CHAMBERS, M. M. "New Laws on School Finance," *Nation's Schools*, XXIV (August, 1939), 31-32.

Summarizes recent school-finance legislation in twelve states and points out that some progress and some backward slips appear in these laws.

78. CUSHOLM, LESLIE L. "An Argument for Federal Aid," *School and Society*, XLIX (May 20, 1939), 640-42

Considers federal taxation with respect to its effect on the operation of the public schools under the existing plan of leaving the general financial support of the schools to state and local governmental units. Points out the uneven burden of taxes and advocates federal aid as a solution to this problem.

79. DEWEY, H. E. "The State vs. the Community in School Finance," *American School Board Journal*, XCVIII (June, 1939), 19-20.

Indicates trends in state aid for schools from 1929-30 to 1935-36 and notes the need for improvement in state tax systems

¹ See also Item 532 (Edwards) in the list of selected references appearing in the October, 1939, number of the *School Review*

80. EDWARDS, NEWTON, and RICHEY, HERMAN G. *The Extent of Equalization Secured through State School Funds*. Advisory Committee on Education, Staff Study No. 6. Washington: Government Printing Office, 1938. Pp. viii+56.
A discussion of the extent to which states have distributed their school funds to areas most in need of financial assistance.
81. EGGERT, WALTER A. *The Legal Basis and Present Status of Short-Term Borrowing for School Purposes*. Chicago: Private edition distributed by the University of Chicago Libraries, 1939. Pp. x+248
A review of statutory provisions and important judicial decisions regarding short-term loans and an analysis of statistical data pertaining to the use of such loans in financing local school systems in the states.
82. *Financial Support, Financial Ability, and Inequalities Existing in Various School Systems in Kentucky*. Educational Bulletin, Vol. VIII, No. 2. Frankfort, Kentucky: State Department of Education, 1939.
Deals with the financial support, the financial ability, and the inequalities existing in the various school districts of Kentucky
83. GRACE, A. G., and MOE, G. A. *State Aid and School Costs*. The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xvi+400.
An analysis of the effects of the present program of state aid and recommendations for the revision of the existing system of school-district organization and state aid.
84. HAIG, ROBERT MURRAY. "The Outlook for School Finance in the Light of Recent Trends," *Elementary School Journal*, XXXIX (May, 1939), 656-63.
Contents that adequate financial support of public education rests ultimately on a sound system of general taxation and points out five trends resulting from recent economic conditions and changes in methods of taxation
85. HAMILTON, ROBERT R. *Selected Legal Problems in Providing Federal Aid for Education*. Advisory Committee on Education, Staff Study No. 7. Washington: Government Printing Office, 1938. Pp. x+72.
This study deals with "The Legal Status of Federal Appropriations to the States for Educational Purposes," "The Constitutionality of Equalization Aid in the States," and the "Legal Aspects of Public School Pupil Transportation."
86. HEER, CLARENCE. *Federal Aid and the Tax Problem*. Advisory Committee on Education, Staff Study No. 4. Washington: Government Printing Office, 1939. Pp. x+102
Advocates federal aid for education as a better means of raising new money for schools and discusses this plan from four points of view: fiscal adequacy, administrative efficiency, equity, and economic effects.

87. JUDD, CHARLES H. "Federal Aid to Education," *School and Society*, XLIX (May 6, 1939), 557-62.
Reviews past and present programs of federal aid for education and explains the changes that have recently been made in the American educational system. Proposes that the North Central Association of Colleges and Secondary Schools enter on a campaign for the purpose of making the people of this territory aware of crucial social needs.
88. MCCUISTION, FRED. "Support of Public Education in the United States: With Special Reference to Negro Schools," *Journal of Educational Sociology*, XII (January, 1939), 257-63.
Presents comparative data regarding the cost of education and of other governmental functions, the ability of various states to support education, the expenditures for white and Negro schools in the South, and sources of public-school funds.
89. MORT, PAUL R. "Rational Bases for Federal Aid," *Nation's Schools*, XXIII (April, 1939), 27-28.
Suggests that federal aid be distributed to support an accepted foundation program rather than on the basis of equalization formulas.
90. MORT, PAUL R., LAWLER, EUGENE S., and ASSOCIATES. *Principles and Methods of Distributing Federal Aid for Education*. Advisory Committee on Education, Staff Study No. 5. Washington: Government Printing Office, 1939. Pp. x+100.
Presents various distribution plans which have particular relevance to the problem of reducing inequalities in educational opportunity.
91. SCOTT, IRA O. "School Finance Laws in Kansas," *Nation's Schools*, XXIII (February, 1939), 60, 62.
Asserts that new budgets, operation on a cash basis, and tax-limitation laws in Kansas have compelled careful educational planning so that present inadequate funds are purchasing a quality of school service equal to that of a more affluent period.
92. *Tax Legislation Affecting State School Revenues, 1934-38*. Research Bulletin of the National Education Association, Vol. XVII, No. 3. Washington: Research Division of the National Education Association, 1939. Pp. 99-158.
Reviews changes made from 1934 to 1938 in state tax laws affecting public education.

BUSINESS MANAGEMENT

93. ATTICKS, KELSEY C. "Adjustment of School Furniture," *Journal of the National Education Association*, XXVIII (October, 1939), 208-9.
Notes effects of improper adjustment of school seating and offers suggestions for improving these conditions.

94. BENNETT, H. E. "For Better School Auditorium Seating," *American School Board Journal*, XCIX (July, 1939), 50-51
Defends upholstered seats for the school auditorium on the bases of drawing power, comfort as a factor in receptivity of the audience, and acoustical balance.
95. EELLS, WALTER CROSBY. "Evaluating the School Plant," *Nation's Schools*, XXIII (May, 1939), 60, 62, 64.
Discusses the criteria used by the Cooperative Study of Secondary School Standards for evaluating the school plant.
96. GRUELLE, ORIE P. *State Insurance of Public School Property in Kentucky*. Bulletin of the Bureau of School Service, Vol. XI, No. 3. Lexington, Kentucky: College of Education, University of Kentucky, 1939. Pp. 136.
An analysis of the state-insurance law of Kentucky and a proposal for amendment of this law to include public-school property. Includes a digest of state-insurance laws of other states.
97. *Handbook of Instructions for the Classification of School Expenditures*. Bulletin of the California State Department of Education, No. 4. Sacramento, California: State Department of Education, 1939. Pp. x+64.
A serviceable guide for local school officials who are responsible for public-school financial accounting.
98. HERLIHY, LESTER B. "Expenditures for School Plant Operation," *School Life*, XXIV (April, 1939), 204.
Reports comparative data from a study of amounts expended for school-plant operation in cities of 100,000 or more for the years 1930, 1934, and 1936.
99. LICKING, R. H. "The Inventory—an Indispensable Part of an Efficiently Administered School," *American School Board Journal*, XCVIII (May, 1939), 51-52.
Describes a record form for a systematic inventory and appraisal of equipment so constructed that it becomes a part of the accounting system and can be filled out largely by teachers
100. MORPHET, EDGAR L. "Equipment and Supplies for Small Schools," *American School Board Journal*, XCIX (July, 1939), 19-21, 92
Discusses purchasing problems in the small independent school contrasted with the small school in a large administrative unit. Suggests criteria and specifications in planning equipment needs.
101. PAGE, FRANK A. "Buying for Schools," *American School Board Journal*, XCVIII (March, 1939), 18, 101.
Explains how the purchasing agent can learn more about the use of the goods and the services that he provides in relation to educational objectives
102. PARKER, LAURENCE. "Ways To Save on Building Maintenance and Up-keep," *American School Board Journal*, XCIX (July, 1939), 56, 86.

Suggests forty-eight ways of effecting economies within existing maintenance budgets

103. REEDER, WARD G. *The Administration of Pupil Transportation*. Columbus, Ohio. Educators' Press, 1939. Pp. xii+200

Includes valuable information and suggestions regarding cost, methods, regulations, and standards of service in pupil transportation.

104. REEDER, WARD G. "The Improvement of Public-School Business Administration," *American School Board Journal*, XCVIII (April, 1939), 21-22

Summarizes certain accomplishments of research in public-school business administration and presents several problems in need of further research.

105. *School Buildings and Equipment*. American Council on Education Studies, Series I, Vol III, No. 8. Washington: American Council on Education, 1939. Pp. viii+30.

Discusses the various influences affecting school-plant planning and the major research problems in this area.

106. SUFFIELD, C. L. "Instructional-Supply Administration," *American School Board Journal*, XCVIII (April, 1939), 25-28.

Discusses two points of view with respect to procedures for the administration of instructional supplies. Presents charts of data from a study of practices in the public schools of California.

PUBLIC RELATIONS

107. ASHBY, LYLE W. "Public Relations Tasks for Teacher Organizations," *Nation's Schools*, XXIV (September, 1939), 28-29.

Discusses the democratic right of teachers to influence public opinion and the responsibilities of the profession in supplementing the public-relations program of the school.

108. BROWNING, R. W. "Relations with Parents," *School Executive*, LVIII (February, 1939), 25-26.

Discusses the philosophy underlying school relations with parents and describes the measures employed to establish wholesome relations between a junior high school and its supporting community in Kansas.

109. DALYORP, CHARLES J. "An Auditorium To Serve Schools and City," *American School Board Journal*, XCVIII (June, 1939), 25-27.

Describes an auditorium and arena, erected and controlled by the board of education, to care for school and municipal events.

110. EDUCATIONAL POLICIES COMMISSION. *Social Services and the Schools*. Washington. National Education Association and the American Association of School Administrators, 1939. Pp. xii+148

Describes the interrelations of public school, library, recreation, health, and welfare services. Defines a framework of social policy which would provide for all necessary services through the elimination of undesirable duplications.

111. FLOYD, EDWIN B. "Enlightening Public Opinion," *Nation's Schools*, XXIV (October, 1939), 57.
Urges that the schools must hold themselves responsible for the development of new goals of co-operation, scientific thinking, and considerate group action
112. GRUHN, WILLIAM T, and DALTHORP, CHARLES J "Teachers Should Meet John Citizen," *Journal of Education*, CXXII (February, 1939), 54-55.
Suggests that the entire teaching staff share the responsibilities of public relations through participation in community affairs.
113. HARRAL, STEWART. "The Technique of Press Relations," *Nation's Schools*, XXIV (August, 1939), 18.
Lists nine general principles for the school administrator to consider in his relations with the press.
114. MALLER, JULIUS B *School and Community*. The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York. McGraw-Hill Book Co., Inc., 1938 Pp. xvi+360.
Deals with the social and the economic backgrounds of educational problems in representative areas of the state of New York.
115. SMITH, GEORGE A. "So the Public Will Know," *Nation's Schools*, XXIII (April, 1939), 62.
Describes how a school district in Pennsylvania, to arouse public interest, issued an appropriate illustrated booklet as a celebration of an anniversary of the high school.
116. TAYLOR, MILLICENT J. "Interpreting the School to Home and Community," *School Life*, XXIV (June, 1939), 263-65
Points out that education needs the understanding and support of the home and advocates that the teacher serve his school as an individual public-relations worker
117. ULLRICH, FELIX H. "Does Your Chamber of Commerce Offer Adequate Literature on the City's Schools?" *Clearing House*, XIII (April, 1939), 476-77.
Discusses types of information found in literature of chambers of commerce in sixty-three cities. Suggests that school administrators work with their chambers of commerce to improve the character of information disseminated regarding education.
118. YEAGER, WILLIAM A. *Home-School-Community Relations*. Pittsburgh, Pennsylvania. University Book Store, University of Pittsburgh, 1939. Pp. xii+524.
A discussion of numerous service and functional relations of schools with the home and the community Emphasizes the need for leadership on the part of school authorities in developing co-operative enterprise among all agencies concerned with the educational welfare of children

Educational Writings

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REVIEWS AND BOOK NOTES

SCHOOL MANAGEMENT FOSTERING DEMOCRACY.—Serious concern for the future of the democratic way of life has caused a variety of groups to make critical examinations of their own practices. In particular, schools have become concerned about the opportunities of teachers to participate in activities which would give realistic experience in the desirable methods of democracy. For this reason one especially welcomes the volume which presents the proceedings of the Eighth Annual Conference for Administrative Officers of Public and Private Schools held by the Department of Education of the University of Chicago during the summer of 1939.¹ The book has been conveniently arranged in six parts: "Principles of Democratic Administration," "Training Personnel for Effective Participation in Democratic School Administration," "Organizing a School System for Democratic Administration," "Importance of Democratic Practices in the Instruction and Management of Pupils," "Examples of Democratic Practices in Educational Administration," and an appendix which contains the constitution and by-laws of a teachers' council, a selected bibliography, and a list of the persons who attended the conference.

Anyone who has given serious consideration to the social implications of democracy versus dictatorships and to the present dangers confronting democracies will find in this volume a great many things to stimulate his thinking about the part which school and classroom management can play in safeguarding democracy. The book is not a compendium on social policy or school administration or classroom teaching, but it does focus attention on some crucial points which all teachers and administrators could afford to rethink. Especially challenging are the chapters dealing with "Democracy as an Agent of Social Control," "Difficulties Inherent in the Development of Democratic Procedures in City School Administration," and "How Much Freedom Should Pupils Be Granted To Choose Their Experiences in Learning?"

The reviewer wishes to call attention to a phase of this problem which heretofore has received little attention: the techniques or the procedures which represent effective group methods for dealing with a problem or for implementing social change. We have become so habituated to speech-making, voting on

¹ *Democratic Practices in School Administration*. Compiled and edited by William C. Reavis. Proceedings of the Eighth Annual Conference for Administrative Officers of Public and Private Schools, 1939. Chicago: University of Chicago Press, 1939. Pp. x+214. \$2.00.

something, and committee reporting that it is difficult to shift to other useful means. What are the occasions for which we need to have group meetings? What are the most effective techniques for different types of situations? By what methods can a group move from present status to a desired objective? School administration should help teachers to understand the intricacies of social processes and should give teachers practice in the techniques of group methods. Democratic methods in school administration could incorporate the use of these techniques and thereby give teachers *and* administrators skill in employing them.

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FACTOR ANALYSIS STUDIES ITSELF—Research workers must frequently engage in research on their own techniques. When they neglect to do so, they fall into the error of which this generation accuses all past generations, namely, deciding matters of fact on the basis of preconceptions and interests instead of finding out the answer. The recent statistical development known generally as "factor analysis" has been characterized thus far by the existence of different schools of thought pursuing their individual aims with little effort at objective comparison and practical evaluation. This stage is perfectly natural, each proponent must convince both himself and others that his method will actually work. He must also cultivate major variations and refinements in his technique before it is ready to be subjected to a general evaluation.

When, however, a leader reaches the point where he dares to subject his method to experimental study in order to determine its limitations and possible weaknesses, the layman begins to take a real interest. The technique is then entering its second stage and is nearer being ready for use. It appears that factor analysis is entering this stage. Holzinger and Swineford have proposed a number of practical tests which a technique should meet if it is to be of practical value and have set about to determine whether the bi-factor method will meet these tests. They have previously worked on one of these, and a recently published monograph¹ deals primarily with a second test and incidentally with other problems.

The object of this recent study was to determine whether the same factor pattern would be found for two groups of children who were reasonably different in certain biological and cultural factors. For this purpose three hundred pupils from Grades VII and VIII of two schools were given twenty-four tests. One school was in a factory district where many of the parents were foreign born, the other school was in a good, suburban, residence district. The tests were adaptations of those already tried out in another study and were purposely selected to cover five special or group factors. The results disclosed a general

¹ Karl J. Holzinger and Frances Swineford, *A Study in Factor Analysis. The Stability of a Bi-factor Solution*. Supplementary Educational Monographs, No. 48. Chicago: Department of Education, University of Chicago, 1939. Pp. xii+92. \$1.00.

factor, common to all test responses, and four special factors: spatial, verbal, speed, and immediate memory. Mathematical deduction was measured with five special tests but was found not to be sufficiently dissimilar from the general factor to represent a separate factor. Other factors, which different tests might have revealed, were investigated only incidentally. Of the total variance in the test scores for one school, 56 per cent was attributable to unidentified factors (unreliability of tests and factors specific to each test), 22 per cent to the general factor; and the remaining 22 per cent to the four special (or group) factors, verbal ability receiving nearly 10 per cent of the 22 per cent.

How closely do the findings agree for the two groups of children? Stating that "the data gave rise to factor patterns which, although identical in plan, differed widely in size of pattern loadings" (p. 48), Holzinger and Swineford tested the practical consequences of these differences by "employing the regression equations based on one group to estimate the factors of the other" (p. 49). They found correlations of .934 and .912 with the results from the regression equation of the other school. In other words, for practical purposes an equation based on either of the schools could be used satisfactorily for estimating the degree of the factors present in the individual pupils. This point is the crux of the investigation.

As an element of secondary interest, school marks of nine subjects were factored. The total variance was found to consist of 37 per cent of uniqueness (specificity and unreliability of marks in each subject), 24 per cent of general ability, 11 per cent of verbal ability, 23 per cent of "halo" (*general* estimation of the pupil), and 5 per cent of other factors. These nine marks for each pupil were added to the table of twenty-four tests and the entire thirty-three variables refactored, with but little disturbance to the factor weights originally found for the twenty-four and the nine traits separately.

We can heartily indorse the authors' conviction that "evidence of this sort is necessary before we can proceed with confidence to use factor analysis as scientific description of mental life" (p. 2). Certain fundamental differences in various methods of factor analysis will probably not be resolved by objective studies, because they are differences of underlying philosophy. But studies of applications will bring into relief the characteristics of the various methods so that they can be better judged. Both educators and psychologists will welcome more such studies—with due appreciation for the large amount of labor in making them.

DOUGLAS E. SCATES

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A BASIC MUSIC PROGRAM FOR ELEMENTARY SCHOOLS—The State Department of Education of California, with the help of a group of music educators, has compiled a manual¹ that will be of interest and assistance to music teachers

¹ *Music Education in the Elementary School*. Sacramento, California: State Department of Education, 1939. Pp. xvi+152. \$1.00.

generally. The plans and the materials represent modern educational ideas and are a gratifying departure from the courses of study of the older type often issued by state departments or city systems. Chapters treat of point of view in elementary music, the development of vocal music, music as an integrative experience in the major learnings, the development of music appreciation, creative expression in music, instrumental music, and music in rural schools. Specific materials are listed, and ways of presenting them are given for each grade level. At the close of each chapter, references are given for pupils and for teachers.

Treatment of topics is necessarily brief in a book of this size, but it would have been advisable, in certain cases, to point out more than one way of teaching. For example, the seating plan given for the singing period is not always feasible in lower grades, where desks are not placed in regular order. Sometimes, too, poor singers profit from sitting among the good ones. Raising the pitch of a song will not always remedy faulty intonation; in fact, the reverse is sometimes true. No mention of individual differences is made in regard to range of children's voices. Only the "phrase" method of teaching a rote song is cited.

On the other hand, helpful suggestions are given to make music an interesting and worth-while experience for young people. Particularly valuable to teachers are the descriptions of lessons that have actually taken place, the type lesson plans, units of work, the outline for developing music material in relation to any unit of work, the record card for checking instruments, and the rating chart for the selection of materials.

The book is well made. Binding, paper, and type are of good quality. Attractive and appropriate illustrations add to the book's effectiveness. There is a complete table of contents, although an index is lacking.

The volume is highly recommended to supervisors and teachers of elementary-school music.

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SCIENCE FROM THE KINDERGARTEN THROUGH THE FOURTEENTH YEAR.—In the Thirty-first Yearbook of the National Society for the Study of Education, the Society's Committee on the Teaching of Science recommended a continuous and correlated program in science beginning in the first year of school and extending through the high school. A new publication¹ describing such a science program will be welcomed by science teachers and curriculum workers as well as by those who are particularly concerned with instructional programs. This publication has added significance because it presents the procedures of a school that was one of the pioneers in introducing science into the elementary

¹ *Science Instruction in Elementary and High-School Grades*. By Members of the Faculty of the Laboratory Schools of the University of Chicago. Publications of the Laboratory Schools, No. 7. Chicago. Department of Education, University of Chicago, 1939. Pp. viii+232. \$1.75.

school. This bulletin shows how to avoid frequent duplication of units with the accompanying gaps resulting from omission of other units. It gives to teachers of all levels a view of the entire science program and shows how a school uses its superior facilities for the enrichment of the curriculum.

The major divisions of the publication are concerned with the program in the kindergarten-primary grades, the intermediate grades, the high-school grades, and the four-year college. In the first three divisions a somewhat similar plan is followed. Each is introduced with a description of the types of activities used at that level, followed by a discussion of the place of science in the particular grades, plus a discussion of methods of teaching and suggestions for evaluation. The experiences for the kindergarten-primary grades are classified as incidental experiences, planned experiences, and organized units. Detailed descriptions of representative experiences of each of the three types give the reader a good idea of the operation of the science program in the school. Significant features of the organized units are the core ideas, references for teachers, reading material for pupils, and experimental and observational materials. In addition to those units described in detail, an extensive list of other units is included.

The intermediate-grade program is presented in a manner similar to that for the kindergarten-primary grades. Here, however, no representative incidental experiences or planned experiences are described in detail. In these grades science classes meet in a special science-room at regularly scheduled periods. Other variations are use of work sheets or guides, use of formal tests, and provision of a list of "More Things To Do."

Detailed descriptions of procedures followed in representative units are also presented for the high-school grades (Grades VII, VIII, IX, X). Although a definite attempt is made "to avoid a strict division of subject matter between courses" (p. 125), the physical sciences are emphasized in the first three years while the biological sciences are stressed during the fourth year. In the high school more attention is placed on evaluation and reports. Planned extra-curriculum activities, such as the "Question Period," "Bright Monday Sermons," and activities in connection with National Apple Week, are special features at these grade levels. In the four-year college (Grades XI, XII, XIII, and XIV) the science program consists of a two-year general course in the physical sciences and a two-year general course in the biological sciences. Only an outline of each of the nine to twelve units making up each year's course is presented.

In addition to the features already mentioned, this book should be commended for the thoroughness with which the programs for individual grades and for the entire school have been planned. Even though planning has been a watchword, teachers are encouraged to take advantage of incidental opportunities that may arise. A few of the suggested procedures are of doubtful value, for example, having pupils copy material presented on work sheets (p. 78); asking pupils to "read pages 194-95" without presenting them with a

purpose for doing such reading (p. 79); and asking pupils to solve jumbled-letter puzzles, such as seeing that *n-a-r-t-i-g-e* is the name of a volcanic rock. There are also a few misstatements of scientific facts, for example, "Wood buried under thick layers of sand or clay or lava turns to stone . . . and is then known as 'petrified wood' " (p. 18). Those educators who favor the single-teacher-per-room organization in the intermediate grades will question the use of a special teacher of science. Perhaps the failure to make maximum provision for pupil ownership is the chief weakness of the teaching procedures described. While it may not be the true situation, the reader gets the impression that pupils are, for the most part, doing things thought out or suggested by the teacher rather than working to solve problems that the children themselves have helped to set up.

The reviewer is of the opinion that this publication is a valuable contribution to the field of science and instructional programs.

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EDUCATION FOR PUPIL PARTICIPATION IN SCIENCE.—Every individual participates in the world which science has given us whether he wills it or not; he just can't help it. The writers of the junior high school textbooks of science here discussed¹ have attempted to make this participation more intelligent by presenting, in appealing form, worth-while aspects of the science of the environment for thoughtful consideration by the pupils in these grades. The three books follow the psychological pattern of beginning with the immediate and near-by environment in the first book and extending outward to the world in the second book and to the universe in the third book. Each succeeding book is more voluminous as well as more comprehensive than its predecessor. In the third book the author of Books I and II from the Philadelphia school system has had the co-operation of two additional authors from New York and Brooklyn. The series is evidently intended for Grades VII, VIII, and IX.

Books I and II were apparently written after Book III and follow a somewhat modified plan. All are organized around units. Each unit is briefly introduced as a whole and includes several chapters. A chapter tells a story without interruptions by study devices or directions for experiments. In Books I and II a series of directions following each chapter seeks to lead the pupil to read, observe, experiment, or engage in other reflective-thought exercises which will develop understanding, desirable scientific attitudes, and modes of attack for accomplishing the stated purpose of the chapter. The directions include a

¹Interpreting Science. Book I, *Understanding Our Environment* by Franklin B. Carroll, pp. x+438, \$1.48; Book II, *Understanding Our World* by Franklin B. Carroll, pp. xii+554, \$1.56; Book III, *Understanding the Universe* by Franklin B. Carroll, Frank A. Rexford, and Henry T. Weed, pp. xx+712, \$1.68. Philadelphia: John C. Winston Co., 1939.

reading of the chapter, but this activity is not always listed first. A prominent feature is the stress placed on vocabulary. Book III omits these detailed study directions but emphasizes experiments, 182 in number being outlined. Teacher demonstrations are included.

All the books are profusely and wisely illustrated. Book III includes nearly six hundred illustrations; Books I and II, a somewhat smaller number, respectively.

The series of units in the three books do not follow a discernible sequence, some of the topics being repeated in more than one book. For example, each book includes a unit on water, but the chapters in these units are different in each case. Book I discusses the relations of water to life, to the air, and to the earth, and the value of water; Book II gives attention to impure water, water and heat, water to drink, water to wash in, water for other purposes, and sewage disposal; Book III considers water science, putting water to work, safe and sufficient water, and the chemical purity of water. Similarly there are repeated discussions of health, air, and heat. The treatment is thus cyclical to some degree. Physical and biological materials are well distributed in all three books, and no effort to separate them is in evidence. In abstractness and general mode of treatment, Book III notably resembles more nearly the current textbooks in physics and chemistry, but it is distinctly general science, however.

These books will, undoubtedly, be of great help to teachers and pupils associated with junior high school science. They are attractive in form and are well printed. They serve to bring to the fore the question of the place and the function of the textbook in the teaching and the learning of science. When that problem is more nearly settled, it may be possible to establish better criteria for the evaluation of textbooks in science.

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AMERICAN HISTORY FOR JUNIOR HIGH SCHOOL PUPILS.—The great achievements of a liberty-loving people, blessed with bountiful resources and loyal to democratic ideals, are set forth in a book which has been written for young Americans of the junior high school age.¹ It has been written for use in history classes in Grades VII and VIII.

There are ten major divisions in the book (1) "A New World," (2) "Home Builders in the Wilderness," (3) "Colonial Life and Problems," (4) "A New Nation Is Born," (5) "Early Years of the Republic," (6) "Empire Builders," (7) "Sectional Issues and Social Problems," (8) "Industrial Leadership," (9) "World-Responsibility and World-Power," and (10) "The Meaning of American Civilization."

¹ Charles E. Chadsey, Louis Weinberg, and Chester F. Miller, *America in the Making: From Wilderness to World Power*. Boston. D. C. Heath & Co., 1939. Pp. xviii+729+xlvi. \$1.76.

The authors have followed the usual chronological plan of organization. A few of the chapter headings, such as "Furs versus Farms (Seven Years' War)" and "The Bounty of the Land," should arouse the curiosity of the readers. Study helps are given at the close of each chapter, but there is no particular overview or approach to stimulate the interest of the reader in the topic that he is about to study.

As the authors point out, they chose a title which reflects their viewpoint—that *America in the Making* is a *continued* story. They have tried to reflect the flowing stream of events: to link the past with the present and to reveal the fact that the present is, in turn, determining America's tomorrow.

The book contains a number of cartoons which will appeal to pupils. It lacks a little in attractiveness, however, since it contains no actual photographs or colored pictures.

One of the strong points in the book is the final division, "The Meaning of American Civilization." This division is, in a sense, a summary of the book. It sets forth the contributions which Americans have made in the fields of science, art, and literature. The culmination of this division is the discussion of "American Ideals" in the last chapter. The authors point out that these ideals—liberty, representative government, equality, free education, religious tolerance, brotherhood, and democracy—constitute the chief contribution of American civilization to world-culture. Their splendid brief for American democracy is most fitting and timely.

VIRGIL STINEBAUGH

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THE EUROPEAN BACKGROUND OF AMERICAN HISTORY—A teacher of history in a large high school has joined with the president of a teacher-training institution in adding a new textbook¹ to the already large group of books designed for use in sixth-grade history classes. This book embodies some suggestions found in *Conclusions and Recommendations* of the Commission on the Social Studies of the American Historical Association published in 1934. Among other things the book aims at a simple narrative style and the elimination of most references to chronology, since detailed chronological material is difficult for children of the intermediate grades. The use of proper names has been limited as much as possible, and explanations are given of the pronunciations of the names which appear. Mythology and other interesting stories are included. Every effort is made to emphasize fascinating detail and episode.

The contents of the book are divided into eight parts, the first dealing with pre-history and with Egypt and Babylon; the second and the third parts, with Greek and Roman civilization, respectively. The fourth section discusses the

¹ Merlin M. Ames and Jesse H. Ames, *Homelands: America's Old-World Backgrounds*. St. Louis, Missouri: Webster Publishing Co., 1939. Pp. xviii+498. \$1.24.

Dark Ages and the fifth the rise of modern nations. The sixth section deals with exploration and the settlement of the New World, while the seventh describes Colonial America and the eighth deals with nineteenth- and twentieth-century immigration from Europe to America. This book is not, however, a brief history of the world. Rather is it composed of episodes, incidents, and descriptions drawn from the whole field of history.

The book is well printed, and the illustrations are excellent and largely new. The book closes with a helpful index. Each of the sections begins with a brief one-page statement concerning the general contents of that section, and each chapter closes with suggestions which will be helpful to the teacher. Among these will be found bibliography, lists of projects and activities, a word list, and a list of topics for discussion.

D. S. BRAINARD

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St. Cloud, Minnesota*

CHILD EXPERIENCES IN SELECTED REGIONS OF AMERICA.—A book by Pitkin and Hughes¹ presents, so vividly that they appear real, child experiences in many well-chosen regions of America. Interest is aroused through portrayal of children similar to those most likely to use the book, namely, children of modest means. By featuring principally a son and a daughter of a commercial truck driver, the authors readily achieve two purposes: First, they do not need to bring in the proverbial wealthy uncle to take the children on trips. Second, they splendidly motivate the work, for what child would not like to go places in a commercial truck. The authors have seen fit not to use the same children throughout the book but, for picturing widely separated regions, have described the experiences of different sets of children. Thus they do not need to find reasons for driving the truck into distant places; rather they utilize the means of travel that seem to fit best into the journey portrayed. They make the transition so skilfully that interest is not lost.

In their regional portrayal the authors present experiences on farms in Lancaster County, in the coal mines of western Pennsylvania, in New York City, Washington, and Boston, in cod fisheries of Massachusetts, and in oyster fisheries of Maryland. With the children the readers visit stone quarries in Vermont, sulphur wells in Louisiana, oil wells in Texas, cotton fields in Alabama and Mississippi, cornfields in Iowa, Dakota range lands, Kansas wheat fields, Arizona copper mines, western pine forests and mountainous sections, truck farms in the West, salmon fisheries, orange groves, and many other things of interest. They visit Grand Coulee Dam, Norris Dam, the Dust Bowl, Grand Canyon, Bryce Canyon, Yellowstone Park, and other places. The "coverage" of United States is especially extensive in view of the limitations in size of the

¹ Walter B. Pitkin and Harold F. Hughes, *Seeing Our Country*, Book I. New York: Macmillan Co., 1939. Pp. viii+386. \$1 60.

book and method of approach. The subjects are presented faithfully, accurately, comprehensively, and interestingly.

This work is in no sense a textbook. It should serve splendidly as supplementary material for use in studies of United States geography. The style and the choice of words seem to fit the book to children of the ages of the children portrayed, about nine to twelve years. The excellent illustrations will help greatly in fixing concepts of the regions.

It is probable that the work would be of greater value if many suitable maps were used. The photographic illustrations are so well chosen and clearly printed that readers, particularly geographers, are especially disappointed in the maps. There are only two, one indicating coal fields and the other the cotton-growing region. The most conspicuous items in the latter are five boll weevils, each as large as a county. Nevertheless, the book is decidedly commendable. It will be read with much interest by many children.

WILLIAM J. BERRY

*State Teachers College
Kalamazoo, Michigan*

A HELPFUL GUIDE FOR THE DIRECTOR OF PLAYS FOR CHILDREN.—What *The Compleat Angler* is to the fisherman, Miss Winifred Ward's new book¹ is to those fishers of children, the directors of children's theaters. For the novice in the field *Theatre for Children* should be a portable library, a Baedeker, a *Boston Cooking-School Cook Book*, an Emily Post. Beginning with a brief sketch on the origin of children's theaters and their development, from Paris to Evanston, and ending with an expertly chosen list of plays and a good bibliography, the book packs into the intervening twelve chapters an amazingly complete and practical set of directions for the director.

After an inspiring chapter on the value and the potential beauty of the children's theater, Miss Ward starts us under our own steam. "We Organize for Action," we acquire sponsors, choose a staff and a board of directors, and interest the community in our cause. In the following chapter "We Decide To Write a Play," and we are escorted skilfully through the processes of comparing various types of plays and stories suitable for dramatization, selecting materials, developing plot and characters, and, finally, writing scenario and dialogue. We read the first act of Charlotte Chorpenning's *Alice in Wonderland*, reprinted in chapter v, and study Miss Ward's careful analysis of that charming dramatization.

Every director finds his knottiest problem in the choice of a play, so that every director will read avidly chapter vi, which unties the knots before his very eyes. Here is a discussion of age levels, environment, ideals and standards, plot, settings, royalties, program-planning, and practical considerations of setting and budgeting. All this material is supplemented by a classified play list and a page of publishers' addresses. Back to the theater in chapter vii,

¹ Winifred Ward, *Theatre for Children*. New York: D. Appleton-Century Co., Inc., 1939. Pp. xvi+334. \$3.00.

"The Story Comes Alive" in an admirable chapter on direction. This chapter includes the duties of a director, the difference between dealing with children and adult players, some valuable paragraphs on projection, the management of rehearsals, and the performance itself.

With the statement that respect for the children who are to see the performance and a deep interest in presenting good plays, skilled players, and beautifully complete productions should supersede all other considerations, Miss Ward, in a chapter on "Call the Players," sets the standard of the children's theater—and sets it high.

Chapter ix is a practical discussion of costumes. Colors, materials, designs, and dyeing are taken up, as well as the organization of the wardrobe and the duties of its manager. Then follows an equally practical chapter on staging, the property manager, technical director, and crews. Both these chapters are illustrated with good working drawings. Next, publicity and the budget—problem children of the theater—are dealt with so intelligently that they become docile and well behaved. Examples of advertising are given, and under the heading "We Pay the Bills" items of expense are listed and discussed. Requisitions and filing are touched on, and the business manager makes an entrance. A chapter is given to dramatic activities in playgrounds, camps and clubs, and school auditorium programs and then—

The magic moment has at last arrived. . . . Will the miracle really happen? . . . when the whole audience is lifted out of reality and drawn close together in a bond of expectancy, laughter, or sympathy . . . a moment less rare in a children's theater than in adult productions [p. 258].

If we study our audiences carefully and produce our plays beautifully, we will stimulate the writing of better plays . . . which will help our children to interpret life more truly, to build a better society . . . to develop a greater appreciation for beauty . . . and bring lasting happiness to our boys and girls [p. 271].

So Miss Ward takes a bow with a delightfully written book that is as practical as a recipe, as inspiring as a Strauss waltz. We might wish for more illustrations, especially drawings, since, like the children, we want pictures. A generous expansion of the chapters on direction and staging would be welcome.

We cry, "Encore!"

HELEN R. FISH

*South High School
Minneapolis, Minnesota*



CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

CHENOWETH, LAURENCE B., and SELKIRK, THEODORE K. *School Health Problems*
With a chapter on School Health Administration by Richard Arthur Bolt.
New York: F. S. Crofts & Co., 1940 (second edition). Pp. xii+420. \$3.00.

- CLAPP, ELSIE RIPLEY. *Community Schools in Action*. New York. Viking Press, 1939. Pp. xviii+430. \$3.75.
- Democracy's Challenge to Education*. Prepared under the editorship of Beulah Amidon. New York: Farrar & Rinehart, Inc., 1940. Pp. xii+264. \$1.50.
- DOLCH, EDWARD WILLIAM. *A Manual for Remedial Reading*. Champaign, Illinois: Garrard Press, 1939. Pp. x+166. \$2.00.
- In-service Growth of Social Studies Teachers*. Edited by Burt W. Phillips. Tenth Yearbook of the National Council for the Social Studies. Cambridge, Massachusetts: National Council for the Social Studies, 1939. Pp. vi+188. \$2.00 (paper), \$2.30 (cloth).
- JONES, THERESA DOWER. *The Development of Certain Motor Skills and Play Activities in Young Children: A Genetic Study of the Motor Development of Preschool Children as Revealed by Their Use of Wheel Play Materials*. Child Development Monographs, No. 26. New York: Teachers College, Columbia University, 1939. Pp. xiv+180. \$1.85.
- KNOTT, WIDNELL DIMSDALE. *The Influence of Tax-Leeway on Educational Adaptability: A Study of the Relationship of Residual or Potential Economic Ability, Expressed as Tax-Leeway, to Educational Adaptations in the State of New York*. Teachers College Contributions to Education, No. 785. New York: Teachers College, Columbia University, 1939. Pp. x+84. \$1.60.
- MCCLOY, CHARLES HAROLD. *Philosophical Bases for Physical Education*. New York: F. S. Crofts & Co., 1940. Pp. xiv+312. \$2.50.
- NEWLON, JESSE H. *Education for Democracy in Our Time*. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xvi+242. \$2.50.
- PYLE, THERESA P. *The Teacher's Dependency Load*. Teachers College Contributions to Education, No. 782. New York: Teachers College, Columbia University, 1939. Pp. xii+112. \$1.60.
- TURNER, IVAN STEWART. *The Training of Mathematics Teachers for Secondary Schools in England and Wales and in the United States*. Fourteenth Yearbook of the National Council of Teachers of Mathematics. New York: Teachers College, Columbia University, 1939. Pp. xiv+232. \$1.75.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

- Democracy Readers. Edited by Prudence Cutright and W. W. Charters. *School Friends* by Lois G. Nemec, pp. viii+80, \$0.72; *Let's Take Turns* by Lois G. Nemec, pp. viii+118, \$0.72; *Enjoying Our Land* by Maybelle G. Bush, pp. x+182, \$0.84; *Your Land and Mine* by Helen M. Brindl, pp. x+246, \$0.92; *Toward Freedom* by Ruth Mills Robinson, pp. x+278, \$0.96; *Pioneering in Democracy* by Edna Morgan, pp. xvi+336, \$1.00; *The Way of Democracy* by Allen Y. King and Ida Dennis, pp. xiv+400, \$1.20. New York: Macmillan Co., 1940.
- FINCHER, ERNEST B., FRASER, RUSSELL E., and KIMMEL, WILLIAM G. *Democ-*

- racy at Work: Living in American Communities.* Philadelphia: John C. Winston Co., 1939. Pp. viii+566. \$1.36.
- REILLEY, ALBERT G. *Primary Reading Test—Form A.* Boston: Houghton Mifflin Co., 1939.
- War Supplement to Compton's Pictured Encyclopedia: An Alphabetical Reference Book of the European War—Persons, Places, and Events; Armies, Navies, Air Forces, and Economic Resources; Weapons, Tactics, and Strategy.* Chicago: F. E. Compton & Co., 1939. Pp. 102. \$1.50.
- WATKINS, RALPH K., and PERRY, WINIFRED. *Science in Our Modern World: Understanding Science*, pp. xiv+432, \$1.28; *Science for Daily Use*, pp. xii+500, \$1.48; *Science for Human Control*, pp. xvi+588, \$1.68. New York: Macmillan Co., 1940.

PUBLICATIONS IN PAMPHLET FORM

- MANUEL, HERSCHEL T. "Individual Guidance and Mental Health." *Research Bulletin of the Texas Commission on Coordination in Education*, No. 10. Austin, Texas: Administrative Board of the Texas Commission on Coordination in Education (University Station), 1939. Pp. 39 (mimeographed).
- O'BRIEN, F. P., and TWENTE, J. W. *How Good Is Our Elementary School? Survey Study of Prairie Elementary School, Johnson County, Kansas.* *Kansas Studies in Education*, Vol. II, No. 5. *Bulletin of the University of Kansas*, Vol. XL, No. 7. Lawrence, Kansas: University of Kansas, 1939. Pp. 46.
- A Program of Action for American Youth.* Recommendations of the American Youth Commission of the American Council on Education. Washington: American Youth Commission, 1939. Pp. 20.
- The Recognition and Accrediting of Illinois Secondary Schools: Conditions for Recognition by the Superintendent of Public Instruction and for Accrediting by the University of Illinois.* *University of Illinois Bulletin*, Vol. XXXVII, No. 15. Urbana, Illinois: University of Illinois, 1939. Pp. 82.
- The Regulation of Pupil Transportation.* *Bulletin of the California State Department of Education*, No. 10. Sacramento, California: State Department of Education, 1939. Pp. vi+36.
- The School Plant: Rules and Regulations Governing the Plan, Design, and Construction.* *Bulletin 86.* Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 52.
- SMITH, HENRY LESTER, and EATON, MERRILL THOMAS. *An Experimental Study of Standards for the Selection of Candidates for Teacher-training Institutions.* *Bulletin of the School of Education, Indiana University*, Vol. XVI, No. 1. Bloomington, Indiana: Bureau of Co-operative Research, Indiana University, 1939. Pp. 72. \$0.50.
- SMITH, MARGARET. *Cotton Shirts for Men and Boys.* *Farmers' Bulletin No. 1837.* United States Department of Agriculture. Washington: Government Printing Office, 1939. Pp. 14. \$0.05.

Suggestions for Safety Instruction in the Public Schools. Bulletin of the California State Department of Education, No. 12 Sacramento, California: State Department of Education, 1939. Pp. viii+24

Twenty-five Recent Books for Libraries in Elementary and Junior High Schools. Selected by Carolyn Howard Millersville, Pennsylvania: Training School, State Teachers College.

UNITED STATES OFFICE OF EDUCATION PUBLICATIONS:

Misc. 2267, 1939—*Public High Schools Having Counselors and Guidance Officers* by Walter J. Greenleaf and Royce E. Brewster Pp. 40.

MISCELLANEOUS PUBLICATIONS

Annual Report of the Board of Regents of the Smithsonian Institution Showing the Operations, Expenditures, and Condition of the Institution for the Year Ended June 30, 1938. Washington: Government Printing Office, 1939. Pp. xiv+608. \$1 50.

THE ELEMENTARY SCHOOL JOURNAL

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Educational News and Editorial Comment

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BALANCE IN EDUCATIONAL VALUES

IN EVERY society sufficiently complex to have a system of institutionalized education, the school serves as an instrument of cultural transmission. Always one of its chief purposes is to socialize youth in terms of the social institutions basic to civilized life wherever lived and under whatever form of political organization. Among the institutions basic to civilized society are language, the number system, government and justice, systems of exchange, art, music, etiquette, and religion. In addition, or as a part of the same process, the school has the task of transmitting those accumulations of ideas, knowledge, techniques, skills, and attitudes which constitute "the funded capital of human experience." The school can never for long forget the fact that in a very special sense it is the guardian of the cultural heritage. Always the school will face the task of identifying those elements of human experience which are, in fact, the essential elements of the common culture and of organizing these elements into a coherent educational program. Since man cannot, without deadly peril, retreat from his culture or repudiate his intellectual inheritance, education will always remain, to a considerable extent, a hostage to the past. Only the rash and the ignorant will insist that education does not have a center of interest quite

apart from the currents of contemporary social and political change. Emphasis on the immediate and the contemporary is always essential, especially when the contemporary is pregnant with crisis, but we shall never have a Bible without a book of Genesis nor plan our future wisely in ignorance of our past.

The school also serves as a means of securing social stability—political and social cohesion—and of implementing the core values of society. Every society has its ideas about government, industry, property, family relations, moral codes, and class distinctions. The school always has been and always will be used to socialize youth in terms of these ideas, mores, and values. If society is to have cohesion sufficient to prevent its disintegration, if it is to succeed in implementing its core values, if established mores and attitudes are not to lose their sanctions, if there is to be continuity of institutional development, youth must be socialized in terms of the prevailing cultural pattern. But here is a dilemma with horns sharp and piercing. Youth must be inducted into the culture, and, if social disorder is to be prevented, they must possess a certain loyalty to it. If, however, youth are taught to accept, without critical evaluation, the existing social pattern, the school becomes an agency of social, political, and economic quietism; its role is to implement values, not to question them; its goal becomes social stability, not social change. Here lies a fundamental danger. To make the essential social function of education the maintenance of the existing social structure can have no other effect than to impede or to prevent altogether necessary social adjustments. The danger of such a policy is that it prevents the existence of a "self-repairing" society and, may, in the long run, lead to the substitution of armed revolt for the orderly processes of social change.

Education is also concerned with personality development. In the past the school has given more attention to the transmission of culture and to the socialization of the individual than to the processes by which a person is inducted into his culture. The end purpose has been primarily the imposition of a culture upon the individual with little concern about what happens to the personality of the individual in the process. More recently we have begun to recognize the importance of introducing the child to his culture in such ways

as to develop a personality free of destructive anxieties and conflicts. The old education was concerned too much with the passing-on of accumulated knowledge; there is the danger that the new education may emphasize personality at the expense of other values essential in any well-balanced program.

Educational statesmanship in a democracy will scarcely be satisfied with a theory of education that confines the functions of the school to the transmission of the culture, to the maintenance of social stability, or to the development of personality. Over and above these, the school has a function to perform as an agency of social direction, as a means of modifying the culture; it has a role to play in social transition.

To establish the school as a critic of social values and processes is a difficult task in any society; it has proved exceptionally difficult in our own. There are a number of reasons why this is so. In the first place, students of society have, by and large, overlooked the significance of the school as a social institution. The historian, while giving detailed attention to government, religion, and economy, has given only scant attention to the school as a social force. The political scientists and students of public administration have concerned themselves primarily with phases of public policy other than education, notwithstanding the very large expenditures involved in the support of the public schools and the large personnel employed. The sociologists, likewise, have given relatively little of their effort to an analysis of the social forces that play on the school or to an examination of the role of the school in social transition. Most surprising of all, perhaps, the professional students of education have been so preoccupied with the individual that they too, by and large, have neglected the study of the school as a social institution. They have been much like an astronomer who trains his telescope on a single planet, quite unaware that the planet is a part of a solar system. Teachers have been so preoccupied with the study of mental processes, of measurement, of methods, of the forces that determine personality growth, and with what goes on in the schoolroom, that only recently have they directed a startled glance at the rapidly shifting scene outside.

There are other reasons why the educational institutions of this

country have never been a particularly vital force in the cultivation of critical social intelligence. For generations education was under the domination of the church. The teachings of Christianity, as institutionalized, stressed individual conduct, personal character, the relation of individual to individual, and placed relatively little emphasis on the broader aspects of social policy. In the matter of school control, religious leaders were finally supplanted by business leaders, who came to dominate boards of education at all levels. Businessmen, accepting the philosophy of *laissez faire*, were inclined to be fearful of change in existing social arrangements and were little disposed to have the school cultivate in youth the spirit of critical social analysis. They were, in fact, more disposed to cultivate in youth a belief in unchanging principles of economics and in the immutability of human nature. And then, in the closing decades of the past century, the psychologists, notably the educational psychologists, began to exercise an important influence in determining educational policy and practice. In the nature of his function, the psychologist centered his interest in the individual, in mental growth and processes, in the laws of learning, and in the development of personality. The scientific study of education naturally came to be orientated around the concept of education as psychological process rather than the concept of education as preparation for participation in the making of social policy.

There is, however, a more fundamental reason for our failure to make an adequate analysis of the relation of education to the processes of social change and for our failure to make the social sciences highly effective instruments for the cultivation of social intelligence. In the past, at least until very recently, our schools, high and low, have had no very definite social objective other than the maintenance of the existing pattern of social arrangements. Operating in a society which accepted the principles of individualism and which made little attempt to plan or control its future, the school, in the nature of the case, could play only a minor role as an instrument of social criticism. In other words, the school simply could not play the role of social critic in a society that felt no need of criticism and was unwilling to resort to social experimentation. Naturally the fruits of education were regarded as essentially private and personal

rather than as public and social. The instructional content came to contribute much to personal culture and prestige, much to professional and vocational efficiency, but far too little to an understanding of the dynamic forces operating in American life.

The purpose of the foregoing paragraphs is to emphasize the need of balance in our educational program—balance between the past and the contemporary, between the needs of the individual and the demands of society, between social stability and social change. No generation of educators has needed more sorely than ours to see clearly the task of education and to see it whole, and no generation has been more given to the exploitation of partial views. Educational statesmanship today needs a new configuration of educational values—a configuration in which the part will not be confused with the whole and in which the whole will include all the essential parts.

THE UNREST IN EDUCATION

FOR the past few months *New York State Education* has been running a series of articles under the general title "Current Thinking in Education." Articles in this series have included "Basic Aims in Modern Education" by William Heard Kilpatrick, "Education as Individual Development" by Ruth Andrus, "Social Aims of Education" by Donnal V. Smith, and "Progressive Education Today" by Burton P. Fowler. The most recent article in the series, which appears under the caption employed for the present discussion, is written by I. L. Kandel. The following paragraphs are quoted from Professor Kandel's article.

It would be difficult to find a parallel in the history of education to the bewilderment and chaos which are characteristic of the period in which we live. That education must adapt itself to the conditions, needs, and demands of its day is axiomatic if it is to succeed in producing human beings capable of coping with them. But, while this aim is in the minds of all educators from the most reactionary traditionalists to the most radical progressives, the world has never witnessed such a barrage of theories as are current today everywhere and particularly in the United States. . . .

Progressive education in general is founded on a theory of growth; some of its advocates would have growth with nothing-fixed-in-advance, others would promote growth along the lines of the pupil's own problems or vital needs; the result in both cases is a type of opportunism which eventually becomes crystallized

into activities (the word "subject" is taboo), which in turn are given new labels under the rubric of general education. And so we have instead of subjects such activities as "human living," "social living," "scientific living," and "aesthetic living." The essence, however, is that the pupil shall start with his immediate problems and his immediate environment; the teacher sits by only as a guide without a plan other than to see that there is no interference with the spontaneous growth of the pupils. In this way they will be trained through their own experience to meet the problems which will confront them later in life. Knowledge must be functional and instrumental; "mere" knowledge is useless, a reason for discarding any effort to measure growth by new-type objective tests. Progressive educators reverently refer to Dewey as the source of their theories. It would be well if they would occasionally read Dewey's writings without the obsession of their own derived interpretations. His article in *Art and Education* (Merion, Pa., 1929) might give them pause; and his discussion of instrumentalism in *Democracy and Education* might lead to a reformulation of their concepts of knowledge, for there (p. 281) he writes, "It is as true of arithmetic as it is of poetry that in some place and at some time it ought to be a good to be appreciated on its own account—just as an enjoyable experience, in short."

Throughout the history of education progressive education with its emphasis on the individual and his own experience has always been symptomatic of great social upheavals. It appeared first, so far as is known, at the time of Athens' decline; it reappeared in the seventeenth century when new worlds—physical and scientific—were opened up; in its present manifestation it has its roots in the era of Rousseau and the French Revolution, and its immediate cause in the general unrest that has affected modern culture and civilization since the end of the nineteenth century. It is analogous to and manifests the same absence of standards, the same opposition to so-called authoritarianism, and the same exaltation of the creative spirit, which means growth and experimentation with nothing fixed behind or in advance, that are found in current literature, art, and music. It is a protest against technology and the machine age and a desire to save the individual from becoming a *Massenmensch*. It seizes on the fact of a changing civilization and assumes that there are no such things as eternal values, not even in the field of morals, that man must eternally raise himself by his own bootstraps, and that the past has nothing to offer of any value for the present. From this it is an easy step to the principle that human nature must and can be changed. In a scientific age all human activities must be experimental, for nowhere is there any certainty; everything is precarious and in a state of flux.

It is interesting to note that progressive education has had its greatest vogue in countries like Soviet Russia which sought to make a complete break with the past, or Republican Germany which aimed to build a new *Deutschum* after 1918, or the United States where some educators believe with Henry Ford that "history is bunk" or accept the myth that this country, although the heir to two thousand years of the world's culture, is still young and has no culture. Progressive edu-

cation of the type discussed here is not nearly so widespread in countries like Great Britain and France which are rooted in strong social and cultural traditions. Added to this is the injection of the peculiarly American concept of efficiency—the desire for immediate returns for every outlay of energy or money.

Essentialists and traditionalists, assuming that there is a difference between them, are united in their belief that “the wise have much in common with each other” through the ages, that successful education is concerned with the play of ideas and not with problems of the moment, to the solution of which ideas may well contribute, that even problems cannot be recognized without antecedent knowledge, that learning does not proceed on the animal level of immediate urges and drives, that only by a specious romanticism and an extravagant interpretation of the meaning of democracy can it be claimed that each individual “creates” his own world, that the function of education is to create interests, and that, while methods of instruction must concern themselves with the individual as a human entity, education must lead him out of and beyond his own immediate concerns. Finally, agreeing with Dewey’s statements that subjects are “saturated with social meaning” and that “as an ideal the active process of organizing facts and ideas is an ever-present educational process,” and with Bode that “the traditional subjects stood for an educational value, which we neglect at our peril,” they insist that education must be organized, systematic, and planned, taking account of the individual as one datum and the world in which he lives and is to play his part as the other. But in the long run the teacher as artist, with insight into and understanding of both data, is the essential force in an educative process whose end is to enable the individual to continue his own education.

REDIRECTING ELEMENTARY EDUCATION

SCHOOL superintendents and principals, and elementary-school teachers in particular, will be interested in the latest publication of the Regents’ Inquiry into the Character and Cost of Public Education in the State of New York. The volume, entitled *The Changing Elementary School*, was prepared by Leo J. Brueckner, of the University of Minnesota, with the assistance of a number of nationally known educators. The report presents an appraisal of the educational program at the elementary-school level and makes specific recommendations for the improvement of the program.

The following paragraphs describe the educational product of the New York schools.

The general level of achievement of sixth-grade pupils in the selected schools is somewhat above the standard norms of the tests used, and is quite similar to that of large groups of pupils in the states of Maryland and Minnesota. How-

ever, very wide variations exist in the levels of achievement among the various places tested. The scores are in general lowest in the smaller places and one-teacher rural schools. Large numbers of these pupils are performing at levels considerably lower than accepted standards, and many others are achieving at levels much above the standards for this grade. The differences in level of achievement are directly related to differences in mental levels. These are even greater than variations in level of achievement.

There is evidence that most of the schools are placing undue stress on the teaching of specific facts and skills with the result that they tend to neglect the development of social understanding, rich interests, effective study habits, and worthy use of leisure time. Important differences exist in the interests of boys and girls. The level of interest varies from place to place, reflecting undoubtedly differences in the quality of the educational programs and environmental influences. . . .

There appears to be no direct relation between instructional costs and the level of achievement of the pupils or the quality of their interests.

The section of the report dealing with pupil progress in the elementary schools is of special interest. The data presented show extremely wide differences in promotion policies. In some schools nonpromotion was practically unknown, while in others more than 50 per cent of the pupils were not promoted in some grades. Nonpromotion is most common in places having populations of 4,500-10,000 and least common in the larger cities. Everywhere there is a tendency to require more children to repeat the primary than the intermediate grades. The report recommends the abandonment of the policy of nonpromotion.

It has been conclusively demonstrated by well-conducted experiments that for insuring continued growth a much wiser and more profitable procedure than nonpromotion is to adapt instruction to the needs of the pupil at all times, and at the end of the year to advance him to the next grade or class and there continue to adjust instruction to his needs. . . .

The practice of requiring pupils to repeat the work of a grade should gradually be discontinued in favor of a program of differentiated and remedial instruction. In large elementary schools the pupils of a given grade may be grouped in ways that will enable the teacher to adjust more readily the program of work to the individuals in her classes. In smaller schools the teacher can adopt an effective plan of grouping children within a class so as to adapt the work to their levels of development.

SPECIFIC RECOMMENDATIONS

1. Where the number of cases is large enough, special ungraded classes may be organized in which diagnostic and remedial work with problem cases in the

several subjects may be undertaken. It may in some cases be advisable to require a pupil to repeat the work of a grade because of excessive absence during the year, general social and physical immaturity, and failure to make progress, but the decision in each case should be made on the basis of all of the available data bearing on it, not on the basis of a single set of standards of achievement. Similarly it may be advisable to allow large, well-developed children of high intellectual ability to progress more rapidly than at the rate of one grade a year. . . .

5. The state should not set up standards of admission to post-elementary schools but should require these schools to adapt their programs of instruction to the mental ability, achievement level, and needs of pupils who are advanced from Grade VI to Grade VII. The wide range in aptitudes, interests, needs, and levels of achievement of these pupils may require a very different kind of program for children in the upper grades of most schools. This reorganized program must recognize that it is the function of the school to develop a well-rounded, integrated, wholesome personality, all aspects of which must be considered by the school in developing its program. The organization of such a program presents a wide variety of problems that should be made the basis of experimental study by the state.

In the opinion of the surveyors, the curriculum of the elementary schools of New York is rather sadly in need of a thorough reorganization and reorientation. The present curriculum is described as follows:

The curriculum of the elementary schools of New York State is unwieldy and disorganized. It consists of numerous isolated, unrelated bodies of subject matter. In many important respects the content of the curriculum is not up to date nor does it conform to modern trends, especially in the fields of reading, arithmetic, language, and social studies. State syllabi which practically dominate instruction in most of the schools of the state outside of the large cities vary widely in quality and usefulness. In general, they consist largely of outlines of subject matter and lists of skills to be mastered. The syllabi neglect many important social objectives. Systems of state examinations based on these syllabi tend to emphasize the formal aspects of each subject.

There is no state agency primarily responsible for the experimental development and continuing revision of state syllabi, hence a number of them are antiquated. On the whole there is very little participation by teachers in the investigations leading to the preparation of the state syllabi. The content is not flexible, nor is it adaptable to the widely varying conditions in the state. Surprisingly few local courses of study of merit exist. Many of those that are available are mere adaptations of the state syllabi.

It is recommended that under the leadership of the State Education Department the schools of New York undertake a co-operative

study of the curriculum with a view to evaluation and reconstruction. Some of the major considerations that should determine the nature of the state program of curriculum study are stated as follows:

1. The state is obligated to make a continuing study of current social, economic, and political trends for the purpose of considering the ways in which they are likely to affect the activities of the school. The school should be responsive to these changes. The schools should take an active part in the process of directing social trends toward desirable goals. "Youth must understand the social order." He must be led to see "the feasibility of intelligent human control."

2. The curriculum should recognize the social purpose of the schools of this country to give children experiences which will develop in them the desire and ability to participate effectively in the affairs of our evolving, industrial, democratic society. "Effective participation in an evolving society means participation with intent to control." The acceptance of these views in curriculum-making will insure "direction and continuity of learning." . . .

4. Educational objectives should be broadened to include all important outcomes of learning, such as character traits, emotionalized attitudes and appreciations, generalizations and understandings, and effective wholesome ways of working, thinking, and living, in addition to the acquisition of commonly recognized essential knowledges, skills, and specific abilities. The mastery by pupils of basic essentials in reading, language, and numbers should be clearly recognized as only one of the major objectives of the elementary school.

5. The curriculum should not be organized as many different isolated subjects, as it is at present. The basis of organization should be the major fields of human knowledge and culture, including language, social studies, exact science, health, and fine and industrial arts. Steps should be taken to organize the curriculum so as to bring out the relationships between organized bodies of human knowledge and to facilitate integrated learning. To this end the curriculum should be related as closely as is possible to the affairs of life. In selecting the contents of courses full recognition should be given to the needs and interests of the children, so that the curriculum may be vital. Emphasis should be placed on learning through use rather than through routine memorization.

6. Research, experimentation, and investigation, conducted on a planned, co-operative basis by the schools of the state, under the leadership of the State Education Department, should be utilized in the development of the curriculum.

7. Because of the differences in conditions among the various cities and rural areas of the state, it is essential that no attempt be made to set up a uniform course of study to be followed by all of the schools of the state, both urban and rural. However, a body of underlying principles growing out of study and discussion and officially adopted by the state should be the basis of all curriculum work. Provision should be made to assist each place to develop a curriculum that is best adapted to the local situation, subject to the rigorous scrutiny of the state.

8. Because of the wide variations in the abilities, needs, and interests of the pupils, the curriculum should be adaptable and flexible, so that each school can effectively differentiate its curriculum content in terms of the capacity and needs of the pupils.

The report points out that the quality of classroom instruction in the elementary schools leaves much to be desired. The general status of instruction is described as follows:

By and large state syllabi and the textbook dominate instruction in the elementary schools in New York. The purpose of instruction appears to be largely to get pupils to master organized bodies of formalized, inert subject matter. The various subjects are not taught in such ways as to bring out their interrelationships, and the teaching schedule in most schools consists of a series of time allotments to the various subjects, which tends to increase their isolation and to prevent the developing of their interrelationships.

Little is done by many teachers to relate much of what is taught to the experiences of everyday life. Hence instruction lacks vitality. Emphasis is placed with considerable success on routine drill procedures to establish basic skills and specific abilities. Other socially desirable outcomes, such as interests, appreciations, and dramatic traits, are given inadequate consideration.

For example, tests show that reading skill is high, while knowledge of literature rates relatively low, and many children do little free reading; abstract computational skill is high but knowledge of the social applications of numbers is relatively low. While in some schools an attempt is made to show the pupil the value of these specific skills and abilities through their use in his daily experiences, in most cases the emphasis is placed on their mastery without relation to their use. Lack of interest, even dislike for the subject, result. . . .

That attempts are being made to reduce the formality of teaching procedures is shown by the emphasis being placed in some systems on "progressive education" practices. Excellent use is being made in several of these schools of such activities as excursions, experiments in science, dramatics, and construction work. These activities add much to the vitality of instruction. That such procedures are not used more widely in the schools is a fact to be deplored.

In few schools is effective use made of the motion picture as a means of instruction. Schools claim that the films they can afford to show cannot compete with the excellent types of films being shown in local theaters. Very little use is being made of the radio except in Rochester and in some schools in New York City. Many schools did not have radios in the building. Others were wired for them in all rooms. . . .

The general conclusion reached by the assisting specialists is that the outstanding characteristic of instruction in the elementary schools is its extreme variability as to basic philosophy, quality, richness, organization, and efficiency. One finds here as rich and effective programs as can be found anywhere in this country. On the other hand, there are exhibitions of meager, unskillful

instruction that cannot be too severely condemned. These are found in places both large and small, with high costs and with low costs.

The general level of instruction is not higher than in other states. On numerous occasions superintendents indicated their belief that the feeling of security resulting from the operation of the state tenure law has led to an attitude of complacency on the part of teachers and to a discontinuance of further training. Serious problems of mental hygiene exist among the teachers. It should also be pointed out that in some school systems the number of superannuated teachers was very noticeable. Many of them indicated that they had had no training in recent years. As will be shown in the next chapter, the lack of effective supervision and leadership is an important contributing factor to the uneven quality of instruction.

Space will not permit further analysis of the findings and the recommendations of the report. We conclude with the statement that this publication is an important document, the reading of which, we believe, would profit teachers the nation over.

EDUCATION IN ENGLAND DURING THE WAR

THE following statement, quoted from a recent editorial in the *London Times Educational Supplement*, shows how a portion of the people feel with regard to the present educational situation in England.

Lord De La Warr spoke for many people when he said at Leeds before Christmas that he hoped that local authorities "would do all they could to get children under eleven, as well as over, into schools. The sooner they did so, the better would the government be pleased." The president of the Board of Education sees clearly the harm that is being wrought to thousands of children who are running the streets because there is nothing else for them to do. It would be tragic if, through the slackness of local authorities, children were allowed to grow up unworthy of the sacrifices made by their fathers and brothers. There is a tendency to take the line that, if only inadequate education is provided in the evacuation areas, the parents will not bring children back for safety. Everybody realizes that there is potential danger of air raids, but we agree with the president when he speaks of "the equal danger and risk of depriving our children and young people of that preparation for life which both their own interests and those of the state require that they should have." Lord De La Warr has given therefore a clear lead to education authorities in the evacuating areas to face up to the needs of the children who have been left behind and those who have since returned from the country. It is no easy job. Some of the school buildings are being used for civil or military defense, but the president tells us that, if local authorities find themselves in difficulties about

buildings, they should at once notify the board. Further, he says, if those difficulties arise because of the requirements due to the national emergency, the matter will be taken up with the ministries concerned, who have promised co-operation.

THE SCHOOL AND THE NEW SOCIAL ORDER IN MEXICO

FOR a number of years the government in Mexico has been using the schools in a very definite and positive way to socialize youth in terms of the ideology of the revolution. In order to expand this program of socialization through education and to give it more permanency, the constitution has recently been amended to make mandatory the teaching of the principles of the new regime in all schools below the university level. The following account of recent Mexican policy is quoted from the *Christian Science Monitor*.

Passage of a measure providing for socialist methods of education for all institutions except those of higher learning carries one step further the objects of the Mexican revolutionary program. The measure was passed, as a regulation to Article 3 of the constitution, on the final night of the present congressional session, and will become effective six months from the signing of the presidential decree which confirms the bill.

The program of socialist education has been in process of adoption since 1934, when President Cárdenas took office. At that time he declared that the agrarian, co-operative, and educational problems would be the chief preoccupation of his government, and all of his subsequent actions have confirmed that statement.

The objective of the educational program now incorporated in the constitution is stated in its preamble. This says, in part, that it "is to impart among other basic teachings the methods of scientific investigation, the technique of labor and co-operative organization, and to acquaint the pupils as well with the destiny of the proletarian masses. This, while bearing in mind that their scholastic activities should prepare them for the democratic life of future citizens and render them capable of the solution of the economic and social problems of the nation."

Article 2 of the bill provides that "the object of the various scholastic systems shall be the preparation of a new generation for the advent of a social regime in which the sources and means of production shall belong to the Mexican people and in which the economy and the other factors of betterment shall be organized preferentially for the collective benefit."

A later section states that all primary education shall be planned to uproot "fanaticism, superstitions, and idolatry by means of scientific truth and reasoning." This can only be interpreted as fighting against the mystic concept of the

universe as taught in church schools which in earlier decades governed the Mexican educational system.

Such socialistic education, leading to a rational interpretation of natural phenomena and history, will be implanted in all preschool, primary, secondary, and normal schools. Their entire program "is a public function for which the state alone is responsible," according to Article 1.

Exemption of the National University of Mexico and similar institutions of higher learning from the socialistic program was made in reforms approved by both the Chamber of Deputies and the Senate as amendments to the original measure. The National University has always been a stronghold of conservatism, and in granting it academic freedom the Senate declared that no harm to socialist objectives would be done, since neither farmers nor workers for whom the program is designed attend the university.

Two more important reforms were made to the original regulation. The first was the postponement of coeducation until such times as the school plants are equipped to accommodate both boys and girls, a limitation which may mean that coeducation is indefinitely delayed. The second was the removal of the penalty of imprisonment for all caught violating the new code. Penalties which remain are heavy fines and closing of schools which do not conform. Rigid inspection of all educational institutions by government agents is also provided.

Military education will be required for all students up to the age of fifteen years.

A general analysis of the new program leads to the conclusion that it will positively stamp Mexico's younger generations with a belief in the state socialism being implanted here and equip them to support and make that socialism effective. That it is perhaps the most important social legislation of the revolutionary program is also apparent, for it completely blocks the way for counter-revolutionary elements to influence Mexico's youth.

Senator Antonio Romero, who has been one of the chief defenders of the much discussed measure, defined it as "not the result of a caprice but the consequence of an epoch." A further defense was made by Senator Ezequiel Padilla, who declared that it is the duty of the state to adopt an educational program instead of abandoning so important a phase of the revolutionary program to chance.

A GUIDE TO THE REPORTS OF NATIONAL DELIBERATIVE COMMITTEES

FOR the past six years the Educational Policies Commission of the National Education Association and the American Association of School Administrators has published annually a summary of the important pronouncements of committees and commissions in the field of education. The most recent of these publications bears the title *Deliberative Committee Reports, 1939*.

This summary contains digests of national deliberative committee reports for the calendar year 1939. Each digest presents the main conclusions and recommendations of the committee or commission concerned. We know no document to which the busy professional worker can turn and in so short a time get at least a general view of recent educational trends. We commend this publication to our readers most heartily. It can be obtained from the offices of the Educational Policies Commission, 1201 Sixteenth Street, Northwest, Washington, D.C., at the price of fifty cents a copy.

THE INTELLIGENCE OF OLDER PEOPLE

THORNDIKE's experimental study of adult learning did much to correct the notion that mental ability declines rather sharply as one passes beyond the years of middle life. It made apparent, too, the unrealized potentialities of adult education. More recently an intelligence test has been given over the radio at the University of California. This method of administration may not be the best scientific way of giving such a test, but it at least has the merit of being an excellent way of popularizing the results. The following statement in regard to the findings of the California test is quoted from the *San Francisco Public Schools Bulletin*.

The idea that intellectual senility in men and women begins to set in at the age of forty or thereabouts was sharply contradicted by a recent intelligence test conducted over the radio by the University Explorer, University of California radio commentator. The results of the test appear to be in opposition to recent studies which indicate that there is a distinct drop-off in mental ability, particularly in speed of intellectual operation after middle age.

The number responding to the test was 2,331, of which 1,197 were men and 1,134 women. The age range of the respondents was between ten and ninety years. The average score for those above fifty was found to be about one point higher than that for the whole group. The average of the forty-eight respondents over seventy years was about half a point above the group as a whole. The two persons above eighty-five years of age who took the test made scores only about one or two points below the general average.

The test was held to be "particularly encouraging to those who are nearing the twilight of their lives," by Dr. Frank N. Freeman, dean of the School of Education, who conducted the test. It cannot be taken, however, as invalidating earlier findings concerning the relationship of age to intelligence, he said. The findings do appear to show that, while the average intelligence of a great

mass of people may drop with age, there is a considerable number of older people whose mental abilities are as keen as those of younger individuals.

The two youngest groups taking the test, ranging from ten to fourteen and from fifteen to nineteen years, made about eight points lower than the average of the total group; the 15-19 group by itself just about achieved the average.

WHO'S WHO FOR MARCH

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COMMUNITY CONTACTS OF PUBLIC-SCHOOL TEACHERS

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*

THE area of this research is in the general field of school and community relations. Its special concern is with teachers' out-of-school lives and contacts, and its major purpose is to investigate the reactions of teachers and of other relevant groups to community expectations governing teacher behavior.

A teacher's community contacts are of three major types. One type is professional. Such contacts consist of any and all community relations in which the teacher seeks to further the aims and purposes of the school. The second is citizenship activities, in which the teacher endeavors to function as a good citizen in his community. The third involves the field of leisure-time pursuits, in which the teacher's most common concern is that of personality development in the broadest sense. In the main, the present study was limited to the last of the three areas, although some items dealt with both professional and citizenship activities.

POPULATION STUDIED

3 After a year of fairly intensive interviewing and gathering of life-histories, a tentative questionnaire was constructed covering the items which then seemed significant. The results obtained with this preliminary questionnaire have already been reported.¹ A revised questionnaire was then made out and administered to 9,122 public-school teachers selected with such care as resources permitted and drawn from every state in the nation and the District of Columbia. This sample was highly representative of the nation's teaching population as indicated in a comparison with United States Census data.

¹ Lloyd A. Cook, Ronald B. Almack, and Florence Greenhoe, "Teacher and Community Relations," *American Sociological Review*, III (April, 1938), 167-74.

In addition, correlative data were secured from 356 school-board members, 2,095 lay persons, and 3,054 students training to be teachers.

Study forms were distributed as nearly as possible on a state quota basis. They were sent mainly to selected school principals, superintendents, university professors who had experienced teachers in their classes, and to three state departments of education. Of a total of 13,826 blanks distributed, 6,252 (over 45 per cent) were returned and accepted for tabulation. To this number were added 2,870 Ohio teachers who had been made the object of the same type of study as was made for the nation as a whole. Combination of the Ohio and non-Ohio data brought the total number of cases to 9,122.

The sample may be defined under three major headings: personal factors, school factors, and community backgrounds. Personal factors comprise sex, age, and family characteristics. Slightly less than three-fourths of all the teachers were women—strong evidence to support the oft-repeated remark that teaching is a woman's profession. A sixth were under twenty-five years of age, one-half were between the ages of twenty-five and thirty-four, about a fifth were between the ages of thirty-five and forty-four years, and about an eighth were over forty-five years of age. No significant sex differences in ages were apparent, nor were regional variations discovered.

School factors of importance include the differentiation of the sexes on the basis of teaching level. Two-thirds of all the teachers studied were in elementary education, 26.6 per cent in high school, and 7 per cent did not report the level at which they worked. Women outnumbered men at the elementary level by a ratio of about six to one. At the secondary level, however, men showed a strong preponderance. Though few teachers reported that their fathers were teachers, a teacher tradition is shown by the fact that three-fourths of the group came from homes in which some member was or had been a teacher.

Community background factors were studied under the categories of size of birthplace, where the teacher had spent most of his life, and where he was teaching at the time of the investigation. Since community backgrounds are especially important in this study,

these basic data are presented in Table 1. It is a significant fact that the great majority of the teachers had spent most of their lives in communities of the same size as those in which they were born. Another striking fact is that teachers are definitely small-town people. For example, 64.1 per cent of the 9,122 teachers were born in places with populations of less than 10,000.

TABLE 1

PERCENTAGE DISTRIBUTION OF 9,122 PUBLIC-SCHOOL TEACHERS ACCORDING TO SIZE OF BIRTHPLACE, OF COMMUNITY WHERE MOST OF LIFE WAS SPENT, AND OF COMMUNITY WHERE TEACHING*

POPULATION OF BIRTHPLACE†	PERCENTAGE OF TEACHERS IN COMMUNITIES					
	Under 2,500	2,500- 9,999	10,000- 49,999	50,000- 99,999	100,000 and Over	No Re- sponse
Where Most of Life Was Spent						
Under 2,500 (51.4)	89.5	30.6	29.4	23.1	21.0	29.3
2,500-9,999 (12.7)	3.1	57.0	8.1	7.8	8.0	7.2
10,000-49,999 (13.5)	3.0	4.7	52.4	10.0	6.6	6.3
50,000-99,999 (3.8)	0.6	1.2	1.7	48.7	2.8	1.8
100,000 and over (9.8)	2.0	3.0	6.0	7.6	59.6	5.7
No response (8.8)	2.0	3.5	2.4	2.8	2.0	49.7
Where Teaching						
Under 2,500 (51.4)	70.1	43.0	45.9	36.7	32.5	23.4
2,500-9,999 (12.7)	9.5	26.5	12.9	12.6	10.7	7.5
10,000-49,999 (13.5)	7.2	12.1	25.2	12.4	9.9	8.1
50,000-99,999 (3.8)	1.4	3.7	2.5	26.1	1.8	1.4
100,000 and over (9.8)	5.2	8.1	7.5	6.6	39.6	6.2
No response (8.8)	6.6	5.8	6.0	5.5	5.5	53.4

* This table is to be read as follows: 89.5 per cent of the teachers who have spent most of their lives in communities with populations of under 2,500 were born in such communities, 30.6 per cent who have spent most of their lives in communities with populations of 2,500-9,999 were born in such communities; etc. Seventy and one tenth per cent of those who at the time of the investigation were teaching in communities with populations of less than 2,500 were born in such communities, and so on.

† The figures in parentheses are the percentages of all the teachers who were born in communities of the size indicated.

TEACHER MOBILITY

Initial interest in teacher mobility grew out of the teachers' own concern with this aspect of their total experience as expressed in autobiographical papers. It is a well-known fact that teachers are

a migratory people; what has not been known is how far they travel. Information sought included data on the number of times teachers changed positions and the distances traveled in miles from last elementary education to last college education, from the last elementary education to the first teaching position, from the last college education to the first teaching position, and from the first teaching position to second and third teaching positions. The distances traveled are shown in Table 2.

TABLE 2
PERCENTAGE DISTRIBUTION OF TEACHERS ACCORDING
TO DISTANCES TRAVELED

JOURNEY	PERCENTAGE OF TEACHERS TRAVELING							No Re- sponse
	0-9 Miles	10-24 Miles	25-49 Miles	50-99 Miles	100- 199 Miles	200- 499 Miles	500 Miles and Over	
From last elementary to last college education...	9.5	7.9	10.8	17.7	18.3	13.2	10.9	11.7
Last elementary education to first teaching position	25.3	12.5	7.6	8.3	9.4	8.4	4.1	24.4
Last college education to first teaching position...	5.8	7.6	11.3	18.1	19.2	13.1	8.9	16.0
First to second teaching positions	16.8	14.5	9.8	11.3	13.1	10.8	4.9	18.8
First to third teaching positions	10.1	10.3	8.0	9.0	11.1	10.1	6.0	35.4

While the table has various points of significance, the most revealing fact is that teachers, who appear to move often, *do not move far*. The migration of more than a fourth of the 9,122 cases from the place of last elementary-school education—presumably the place where the teachers were born and spent their childhood—to the place of last college education was less than fifty miles. This distance also included 45 per cent of the cases reporting distances traveled from elementary school to first teaching position, a fourth reporting distance from last college to first teaching position, and over two-fifths of those indicating distances from first to second teaching locations. Though a range of less than fifty miles includes such large percentages, this distance seems relatively small in these days of ex-

treme mobility. It should be remembered, however, that, because the available data on migratory movement are based largely on studies of nonprofessional groups, such as casual workers, comparisons with teachers are lacking in significance. In general the principle most descriptive of teacher migration is that of "limited circulation."¹ That is, while teachers appear to move with notable frequency, they move within a limited radius from the points of reference defined in the study.

SOCIAL FITNESS FOR TEACHING

Under the title of "social fitness for teaching" are included the reported reactions of teachers, school-board members, lay persons, and students to a number of prospective teacher types. Each group was asked to answer the following question for each type of applicant: "Assume each of the following persons as certified to teach, would you employ this applicant to teach in the public schools of your community?" These answers gave the attitudes of the four rating groups toward such "applicants" for positions as a person in bad health, a nonlocal resident, a married woman, etc., in terms of a hypothetical employability quotient. This quotient was obtained by subtracting the percentage of a rating group which disapproved from the percentage which approved an applicant of a particular type and giving the results a corresponding plus or minus value. Uncertain responses were ignored on the basis that these reactions show a uniformly consistent correlation with the votes of approval and disapproval. "No response" totals, ordinarily within 2 per cent of the total vote and uniform within the group, were not counted. In neither instance would the inclusion of these scores have affected the results in a significant way.

In Table 3 employability quotients are arrayed from the highest positive to the lowest negative response of the school-board members. Generalized findings of interest include the following: A married woman is decidedly disapproved (-32.1) by school-board members, definitely disapproved (-12.0) by lay persons, decidedly ap-

¹ C. E. Lively and R. B. Almack, "A Method of Determining Rural Social Sub-areas with Application to Ohio: Part I Text and Maps." Department of Rural Economics, Mimeograph Bulletin No. 106, Columbus, Ohio: Ohio State University and Ohio Agricultural Experiment Station, 1938.

proved (36.5) by teachers themselves, yet less heartily approved by students in training to be teachers (12.4). The student vote is presumably based on anticipated competition with married women. One additional comparison may be indicated. School-board members and teachers would be more likely to employ a person in bad health than a known Communist.

TABLE 3
EMPLOYABILITY QUOTIENTS OF POTENTIAL APPLICANTS FOR TEACHING
POSITIONS IN PUBLIC SCHOOLS AS RATED BY FOUR GROUPS

POTENTIAL APPLICANT FOR TEACHING POSITION	EMPLOYABILITY QUOTIENT* GIVEN BY—			
	356 School-Board Members	2,095 Lay Persons	9,121 Public-School Teachers	3,054 Education Students
Known Protestant	76.5	84.9	93.5	93.5
Native-born with foreign name	56.3	73.2	88.5	89.9
Nonlocal resident	48.3	46.0	78.4	89.1
City-reared person	45.8	66.6	85.4	90.8
Out-of-state applicant	15.4	27.5	69.4	64.9
Known Catholic	-21.3	9.5	53.1	68.0
Known pacifist	-22.8	5.3	29.7	40.4
Married woman	-32.1	-12.0	36.5	12.4
Known Jew	-41.3	2.3	44.8	41.5
Known militarist	-62.0	-50.1	-42.1	-25.0
Light Negro	-82.1	-54.2	-54.7	-33.6
Dark Negro	-85.7	-66.0	-63.4	-49.4
Known radical	-88.0	-72.5	-63.6	-48.2
Person in bad health	-93.3	-87.9	-54.7	-89.6
Known Communist	-94.1	-83.2	-77.5	-57.9

* The percentage of a rating group approving minus the percentage disapproving the employment of an applicant of a particular type

A second type of finding was indicative of the liberalism or the conservatism of the rating group. In the constructing of the score the four groups were ranked against one another on each of the fifteen items. On the first item in Table 3, for example, teachers and students have the highest positive, or liberal, score; lay persons, the next highest; and board members, the lowest. When arranged on this scale of liberalism or conservatism for all items, students were found to be most liberal, teachers ranked second, lay persons third, and school-board members a distant fourth. The attitudes of these

rating groups are so far apart that job-seeking students will be forced to modify many of their attitudes, as here revealed, if they do not wish to endanger their chances for employment as teachers.

TABLE 4
NET APPROVAL AND DISAPPROVAL REACTIONS OF REPRESENTATIVE
GROUPS TO TEACHER BEHAVIOR

TEACHER BEHAVIOR	RATINGS					
	356 School- Board Members		9,122 Public- School Teachers		1,361 Students	
	Men Teachers	Women Teachers	Men Teachers	Women Teachers	Men Teachers	Women Teachers
1. Owning an automobile	61.3	60.0	64.4	59.6	81.0	79.3
2. "Dating" a town person	31.7	28.9	49.7	46.5	65.8	64.2
3. "Dating" another teacher	19.6	19.5	35.2	40.5	67.3	66.7
4. Leaving area over week ends*.	0.8	0.9	9.9	5.5	5.8	-6.7
5. Receiving pay for coaching, speaking	-2.8	-3.1	30.4	29.0	23.3	21.8
6. Single teachers living in apart- ments	-6.2	-11.2	24.6	24.5	36.4	29.7
7. Buying clothes, etc., outside	-8.5	19.4	-4.3	-4.0	-1.6	-1.5
8. Smoking in private	-9.8	-46.2	11.5	11.2	35.0	1.4
9. Not attending church	-9.9	-69.0	-54.8	-54.5	-61.6	-62.2
10. Playing cards for money	-18.2	-56.6	-69.2	-70.0	-72.3	-77.6
11. Joining teachers' union	-22.5	-23.1	9.1	8.5	22.2	22.4
12. Dancing at public dance	-23.9	-26.4	5.7	4.2	25.7	19.0
13. Playing pool or billiards	-25.0	-38.2	-8.0	-17.8	-3.6	-47.2
14. Living outside community	-27.2	-29.7	-11.7	-10.8	-37.4	-39.1
15. Teaching controversial issues†	-34.9	-36.7	-1.2	-1.4	34.2	32.9
16. Smoking in public	-48.1	-80.7	-25.2	-61.9	-16.8	-66.7
17. Playing cards for fun	-48.1	16.9	54.3	54.5	66.8	76.1
18. Making political speech	-55.7	-55.9	-34.9	-40.5	-53.7	-60.3
19. Running for political office	-56.1	-56.4	-33.4	-34.2	-58.4	-57.7
20. Drinking alcoholic liquors	-80.1	-81.3	-71.8	-73.2	-76.5	-76.7
21. "Dating" a student	-86.0	-85.7	-84.4	-86.4	-68.8	-74.0
22. Using rouge, etc . . . . .	. . .	0.4	. . .	45.5	. . .	65.3
23. Teaching after marriage‡ . . . . .	. . .	-43.2	. . .	-1.5	. . .	-24.5

* Item read in questionnaire "Leaving community often over week ends"

† Item read in questionnaire "Teaching controversial issues in the classroom"

‡ Item read "A woman who continues teaching after marriage"

CONDUCT CODES

The part of the investigation dealing with conduct codes for teachers had as its motive the securing of various group reactions to twenty-three forms of behavior. These conduct patterns were

chosen by an inventory of life-histories and on the basis of the trial survey. Six types of answers were provided: strong approval, mild approval, general indifference, mild disapproval, strong disapproval, and reason for discharge. Results are indicated by total reaction scores, obtained by subtracting the sum of the percentages of a group disapproving each item from the sum of the percentages approving, and giving the results a plus or minus sign as appropriate. The reaction scores of the three main groups are shown in Table 4.

Obviously teachers are restricted with respect to such forms of non-school behavior as dancing, not attending church, and buying from nonlocal merchants. To illustrate, "Owning an automobile" rated highest in the approval response of all three groups, whereas "'Dating' a student" drew the greatest negative reaction from board members and teachers but not from students in training to be teachers. This last group reacted most unfavorably to "Playing cards for money" and "Drinking alcoholic liquors." The question of whether teachers should join a teachers' union has occasioned much debate, and it is interesting to observe that the board members opposed their joining by about the same strength with which students favored joining, while teachers were relatively neutral toward the issue.

The pattern of scores on the basis of rank order remained the same as that for employability quotients. These findings suggest that teachers are amenable to community opinion concerning their out-of-school conduct. By and large, teachers appear to behave in ways that communities will approve or at least tolerate.

TEACHER PARTICIPATION IN COMMUNITY ACTIVITIES

Investigation of teacher participation in community activities showed that the average teacher took part in four activities. About 84 per cent of the teachers reporting indicated that they were members of religious organizations. In this activity also they showed themselves to have a substantial place as leaders, about 22 per cent reporting themselves as sponsors or officers in church clubs. With the exception of professional activities reported by 13.6 per cent, they evinced no impressive amount of local leadership in any

TABLE 5
PERCENTAGES OF TEACHERS PARTICIPATING IN TEN COMMUNITY OR-
GANIZATIONS SHOWING GREATEST TEACHER PARTICIPATION

ORGANIZATION	SCHOOL LEVEL		SEX	
	Elementary-School Teachers	High-School Teachers	Men	Women
Church.				
Regular member	62.1	75.1	74.0	68.2
Pay dues or money	38.1	56.6	44.9	50.0
Officer or sponsor	10.6	11.4	16.4	5.5
Parent-teachers' association:				
Regular member	48.9	52.1	49.7	51.3
Pay dues or money	33.3	35.5	32.6	36.2
Officer or sponsor	8.2	7.4	9.4	6.2
Red Cross:				
Regular member	33.5	40.2	37.5	36.2
Pay dues or money	25.7	33.5	29.6	29.6
Officer or sponsor	1.2	1.4	1.7	0.9
Sunday school:				
Regular member	33.6	38.8	41.4	30.9
Pay dues or money	22.0	26.8	27.9	20.9
Officer or sponsor	11.2	14.7	15.7	10.2
Alumni association:				
Regular member	26.3	35.8	33.2	29.0
Pay dues or money	14.7	25.5	19.0	20.6
Officer or sponsor	2.7	4.2	3.9	3.5
Fraternal order:				
Regular member	19.6	30.6	33.8	10.4
Pay dues or money	14.9	24.3	26.3	12.9
Officer or sponsor	3.9	6.2	6.9	3.2
Bridge club.				
Regular member	8.4	18.9	6.9	20.4
Pay dues or money	1.9	2.6	1.5	2.9
Officer or sponsor	0.3	0.4	0.4	0.5
Adult social club:				
Regular member	11.0	16.0	12.8	13.6
Pay dues or money	4.9	9.2	7.2	6.9
Officer or sponsor	2.3	2.9	2.8	2.4
Church youth groups.				
Regular member	12.3	9.8	11.9	10.2
Pay dues or money	7.2	7.0	7.0	7.2
Officer or sponsor	4.5	4.0	4.8	3.7
Y.M.C.A. or Y.W.C.A.,				
Regular member	7.1	12.0	9.0	10.1
Pay dues or money	5.8	9.7	7.2	8.8
Officer or sponsor	1.0	1.7	1.8	0.9

area. Data not given here show that in professional, religious, welfare, leisure, and civic interests the women claimed membership in proportionately larger numbers than did the men. Men teachers were twice as active in fraternal, patriotic, and political groups and decidedly more active in economic associations, which included consumers' co-operatives and labor unions.

A further study of the types of community activities in which the teachers took part was made by scoring participation in the ten specific activities in which teachers indicated the greatest interest or participation. On the basis of regular membership, as is shown in Table 5, the ten major activities are, in rank order of importance: church, parent-teachers' association, Red Cross, Sunday school, alumni association, fraternal order, bridge club (men excepted), adult social club, young people's society of church, and Young Men's Christian Association or Young Women's Christian Association.

While the table invites further analysis, only one generalization will be mentioned. These teachers as a group revealed no substantial leadership in any type of organized community life other than church work and parent-teachers' associations. Further analysis of five hundred representative cases supports this conclusion in that movements and causes led and organized by teachers consist of relatively immature groups such as Boy Scouts and Camp Fire Girls. The meaning here is not that such groups are not important but that as social movements affecting community life they are of minor significance.

The most significant contribution of this study lies in the area of attempted assimilation of the teacher by the community and in the practical readjustment problems which it suggests.

PUPIL EVALUATION OF SOUND-FILM COMPONENTS

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PROCEDURE

IN A preliminary study of the relation of sound-film components—visual elements, auditory features, audio-visual concepts, and motivation for generalization¹—to teaching and learning, arrangements were made to have two fifth-grade classes study a unit of instruction, "Conservation of Natural Resources," over a two-week period.²

A one-reel instructional sound film, produced specifically for use with the unit, was analyzed for its auditory and visual elements, the audio-visual concepts that could be gained from it, and its components leading to generalization. Each of the two teachers was provided with a copy of the analysis, the unit of instruction, some general suggestions for using the film, and a schedule of the experiment. The film was previewed by the teachers before the experiment was initiated.

Three forms of tests embodying elements of the film components were constructed. Each form required (1) pupil reactions to descriptions of environmental sounds, (2) objective responses to general and detailed scene descriptions, (3) subjective responses to questions relating to general sound characteristics of the film, (4) subjective responses to questions relating to aesthetic factors, (5) objective responses to statements pertaining to the film narration and scene elements, and (6) subjective reactions to generalizations considered to be in harmony with the thinking of adult students of conservation

¹ H. A. Gray, "Instructional Sound Film Utilization," *Educational Screen*, XVIII (January, 1939), 10-12.

² The writer is indebted to Ina C. Sartorius, vice-principal of the Horace Mann School, Teachers College, Columbia University, and to Helen F. Giles and Florence E. Taylor, teachers of the classes involved, for professional assistance in this study.

problems. The subjective questions were of the same nature for each form of the tests. The questions requiring objective responses also were of the same type for each test but pertained to different parts of the film.¹ Each section of these questions was arranged by taking approximately every third item from a list in order of occurrence in the film.

The order of the experimental periods was as follows:

First day.—The writer discussed the project with the pupils; introduced the nature of the study unit; announced the film showing; and instructed pupils to look for the meaning of natural resources and for the kinds of such resources, to listen for unusual sounds, and to hear what the speaker said. The film was then shown and discussed, and possible study projects were outlined. Form I of the test was administered. The procedure revealed that, before seeing the film, the pupils did not understand the meaning of conservation, were uncertain about what constituted natural resources, and were uninformed about the history and the present status of the subject.

Second, third, fourth, and fifth days.—The pupils engaged in a variety of projects, including selecting topics for study; gathering study materials; making maps, charts, posters, and diagrams; reporting on progress; assembling pictures; looking up word meanings—all pertaining to the subject of the picture and the unit.

Sixth day.—The pupils discussed the desirability of again viewing the film in connection with their work. After the second showing, the film was again discussed, and Form II of the tests was administered.

Seventh, eighth, and ninth days.—Study projects were continued. Specifically, these projects concerned soil erosion, conservation of forests and wild life, and action that an individual could take to help eliminate waste of natural resources.

Tenth day.—The pupils discussed purposes of viewing the film a third time and summarized their activities to date. Form III of the tests was given subsequent to final discussion of the film. The pupils decided to continue their study projects beyond the experimental period because of the richness of uncompleted study experiences.

¹ The reliability coefficients for the objective parts of the tests were: Form I, .96 \pm .01; Form II, .91 \pm .02; Form III, .95 \pm .01.

INTERPRETATION OF DATA OBTAINED

The data obtained from this investigation are subject to several limitations. The pupils were a highly selected group; their mean intelligence quotient was 123.98, ranging from 101 to 159, with a standard deviation of 14.25. The pupils came from metropolitan homes with economic and cultural advantages. Their unconventional school program gave them many unusual developmental opportunities. Their teachers were possessed of superior training and insight. Because of absences, complete responses were obtained from only thirty-five pupils, seventeen boys and eighteen girls. With these factors in mind, the results obtained from the study are presented and discussed. The mean scores on the objective tests are shown in Table 1.

Sound elements.—The mean test scores on remembering ten environmental sounds in the film are shown first in Table 1. The writer is unable to account for the drop in the score after the second showing. Since the test forms were of the same type and the sounds were chosen at random for each form, the difficulty may have been due to concentration on other film components during the showing or to conditioning during the discussion before or after the showing.

Visual elements.—The mean test scores on six responses to general descriptions of scenes in the film, different for each test, are also shown in Table 1. Here again the statistically significant lower mean after the second film-showing is puzzling. However, there appears to be no reliable difference between the test means after the first and the third showings.

The data in Table 1 suggest that the ability to detect extrinsic scene detail, that is, details which are present but which are not necessary to a correct interpretation of the general meaning of scenes, was low, although it increased with additional showings of the film.

A different situation is found in the scores achieved in responding to descriptions of intrinsic detail—details of a more obvious nature and those which are likely to be considered in a general interpretation of the scene. While the mean score for noting intrinsic scene detail, after the first showing of the film, is higher than those sub-

sequent to the second and the third showings, the ratios of the differences in the means to their standard errors are not of sufficient magnitude to indicate superiority in any case.

TABLE 1
DATA SECURED BY OBJECTIVE TESTS AFTER THREE SHOWINGS
OF A SOUND FILM IN STUDY OF UNIT ON CONSERVATION

	Mean Score (Right Minus Wrong) with Standard Error	Standard Deviation	Diff. S.E. diff.
Memory of ten environmental sounds:			
First showing	5.14 ± .39	2.28	...
Second showing	1.14 ± .58	3.42	...
Third showing	5.26 ± .32	1.88	...
First and second showings			5.71
First and third showings . . . . .			.24
Second and third showings			6.24
Memory of six general scenes:			
First showing	5.54 ± .26	1.54	...
Second showing	2.80 ± .45	2.66	...
Third showing	5.23 ± .27	1.60	...
First and second showings			5.27
First and third showings . . . . .			.84
Second and third showings			4.67
Memory of six extrinsic scene details:			
First showing	- 2.31 ± .60*	3.54	...
Second showing	- .39 ± .43*	2.52	...
Third showing . . . . .	.00 ± .42*	2.48	...
First and second showings			2.59
First and third showings			3.16
Second and third showings . . . . .			.65
Memory of six intrinsic scene details:			
First showing	1.94 ± .41	2.44	...
Second showing	1.57 ± .41	2.44	...
Third showing	1.60 ± .49	2.88	...
First and second showings			1.09
First and third showings . . . . .			.53
Second and third showings . . . . .			.05
Formation of twenty-five audio-visual concepts:			
First showing	5.17 ± .73	4.30	...
Second showing	7.23 ± .86	5.06	...
Third showing	10.10 ± 1.18	7.00	...
First and second showings			1.82
First and third showings			3.55
Second and third showings			1.96

* Negative and zero scores are interpreted merely as differences in scale positions.

Audio-visual concepts.—The data on audio-visual concepts, as shown by reactions to twenty-five true-false statements, which were different for each test form and which pertained to the film's narration and visual elements, reveal consistent gains on the second and the third tests. Here seems to be fairly convincing evidence that, as the study of the unit progressed, with additional showings of the film, the formation of audio-visual concepts increased. This finding is considered significant in view of the fact that such developments were part of the major objective of the film and are the outcome of planned, integrated, film lessons. Corroborating evidence should be considered seriously with respect to methods of film utilization.

Reactions to speaker's voice.—Of the thirty-five responses to the question, "Did you like the speaker's voice in the film?" four pupils reacted negatively after the first showing. Reasons given for such reactions were: "It was too deep," "It was too loud," "Too dark and gruff," "Could be clearer." After the second showing two pupils considered the voice of the speaker unsatisfactory because it was "Too deep" and "In some places not clear." Subsequent to the third showing only one pupil expressed dissatisfaction with the narration quality, but he gave no reason for his decision. Other responses to the question were positive, such as, "Spoke clearly," "Loud and clear," "Talks clearly," "Clear and easy to understand," "Spoke distinctly," and "Explained clearly." An analysis of these responses indicated a fair degree of consistency. That is, most pupils tended to give similar reasons for each of their three judgments. It appears that the pupils involved were sensitive to voice quality and were capable of describing voice attributes which appealed to them. Clarity, understandability, volume, and distinctness were the most frequent considerations.

Narration vocabulary.—At the time of the first showing of the film, eight of the thirty-five pupils said that they did not understand the meanings of all the words used by the film narrator. After the second showing this number was reduced to six, and after the third showing the number decreased to three. No practical means were available for detecting the words in question. From such limited data sweeping generalizations do not seem warranted, but it appears safe to say that the narration vocabulary was understood by the majority of

the pupils and that lack of understanding of words tended to decrease as the study of the unit progressed and additional showings of the film were made.

Environmental sound preferences.—There appeared to be no pronounced sex differences either in environmental sound preferences or in reasons for such preferences. Both sexes displayed ability to discriminate sounds and reacted to similar sound patterns. Sounds of falling trees, waterfalls, forest fires, buzz saws, dust storms, oil-well gushers, discharge of a shotgun, and an oil-well fire appealed to both boys and girls. Reasons given for such choices included: "Because it was real," "Done in a mill," "Like I was there," "Never heard before," "Realized power," "Sounded good," "Always wanted to hear," "Interesting," "Peaceful," "Thrilling," and "Natural." These reactions suggest the ability of the medium to extend the environment of the individual, the motivating possibilities of environmental sounds, and some tendency of individual pupils to project themselves into the film situation. Such pupil sensitivity may have significance both for teaching method and for policies in film production.

Preferences for sound motion pictures.—With one exception (at the time of the third showing), all pupils expressed preference for the sound film on each of the three occasions when they were questioned. With few exceptions, the respondents were consistent in the types of their responses with regard to the preferability of sound films. Many used almost the same words; some, short phrases meaning the same thing; some, a variety of words expressing different thoughts; and a few steadfastly declined to give reasons for their preference. "Understand better," "More interesting," and "Learn more," were the modal responses, and these occurred in significant frequencies. Other responses, such as "Sometimes don't understand," "Don't have to read," "Eyes don't get tired," "Reading takes mind off picture," "Learn and enjoy more," "Can hear them," and "Gives better picture of what is happening," seem to be penetrating evaluations.

Film shortcomings.—In response to the question, "Was there anything in the film that you did not like?" thirty-two pupils replied in the negative after seeing the film the first time. One pupil replied that he did not care for the "distant angles" in the film; a second

pupil reported that the catching of the beaver seemed cruel; and a third that the film was too short. Following the second showing one pupil felt that the film did not explain enough about oil and petroleum; another pupil again referred to the cruelty of trapping beavers; and still another pupil did not like the idea suggested by a scene showing children putting toys into a wooden box. After the third showing one criticism had to do with the sudden snap of the beaver trap; another concerned the humaneness of hunting wild animals; a third expressed repulsion at the sight of a dead fish; and a fourth registered disapproval of the sight of an oil gusher. While considerations of film length, technical aspects of the film, lack of information, kindness toward animals, emotional start, sanitation, and waste are noteworthy, they are not of sufficient incidence to warrant further treatment. All in all, the film in question may be said to have been relatively free from objectionable features in the opinion of the pupils judging it.

Attitudes toward repeated showings.—For the purpose of obtaining expressions of pupil attitudes toward additional showings of the film, the question was asked, at the conclusion of each showing: "Would you like to see the film again? Why?"

After the first showing thirty-two pupils definitely desired to view the film a second time. Two pupils did not consider it worth while, and one failed to respond. The chief reason for wishing a second showing was the desire to understand the film better. Subsequent to the second showing only eighteen pupils indicated that they would care to see the film a third time. Fourteen failed to respond, and three definitely replied in the negative but gave no reason for their decision. "To learn" and "to know more" were the reasons given by five pupils answering in the affirmative. After the third showing only six pupils reported a desire for another film-showing. Twenty-seven replied in the negative, and two did not answer. The feeling that they had learned all they could from three showings seemed to be the most outstanding reason for the negative replies.

From the foregoing it is apparent that, in the opinion of the pupils concerned, multiple showings of the film were desirable in order to realize optimum learning values. While the desire for additional showings decreased materially after the second and the third

TABLE 2
FREQUENCY WITH WHICH THIRTY-FIVE PUPILS GAVE EACH OF THREE
RESPONSES TO GENERALIZATIONS ABOUT CONSERVATION AFTER
THREE SHOWINGS OF FILM ON CONSERVATION

	Agree	Disagree	Don't Know
1. Conservation of natural resources is an important social and economic problem:			
First showing.....	22	4	9
Second showing.....	27	1	7
Third showing.....	30	2	3
2. Regulation of lumbering operations by proper authorities is desirable:			
First showing.....	13	4	18
Second showing.....	17	4	14
Third showing.....	18	3	14
3. The coal industry is in need of reorganization:			
First showing.....	11	8	16
Second showing.....	14	8	13
Third showing.....	20	4	11
4. Oil producers and consumers should be subject to control by adequate agencies:			
First showing.....	7	3	25
Second showing.....	9	1	25
Third showing.....	13	5	17
5. Agricultural practices should be modified to meet changing conditions:			
First showing.....	15	3	17
Second showing.....	14	3	18
Third showing.....	20	3	12
6. Welfare of wild life and human beings has many elements common to both:			
First showing.....	22	2	11
Second showing.....	22	2	11
Third showing.....	21	2	12
7. Depletion of natural resources has been a consequence of our country's rapid development:			
First showing.....	10	6	19
Second showing.....	18	4	13
Third showing.....	15	4	16
8. Forest areas should be closed to the public during dry seasons:			
First showing.....	25	8	2
Second showing.....	22	5	8
Third showing.....	23	9	3
9. Forest-fire prevention should be a government function:			
First showing.....	23	5	7
Second showing.....	25	5	5
Third showing.....	24	5	6

TABLE 2—Continued

	Agree	Disagree	Don't Know
10. We have only begun to discover the many by-products of natural resources:			
First showing	22	8	5
Second showing	25	5	5
Third showing	30	3	2
11. Weather elements have an important bearing on conservation of natural resources.			
First showing	25	2	8
Second showing	26	3	6
Third showing	26	3	6
12. Each generation is faced with new conservation problems:			
First showing	22	4	9
Second showing	32	1	2
Third showing	31	0	4
13. By putting to work the forces of nature, man can raise his standard of living:			
First showing	29	3	3
Second showing	27	3	5
Third showing	32	1	2
14. Most industries would be affected in some way by a program of conservation:			
First showing	9	7	19
Second showing	13	5	17
Third showing	17	3	15
15. Conservation should recognize the rights of individuals to share the benefits of natural resources:			
First showing	17	6	12
Second showing	19	2	14
Third showing	17	4	14
Average:			
First showing	18.1	4.9	12.0
Second showing	20.7	3.5	10.9
Third showing	22.5	3.4	9.1
Percentage of pupils.			
First showing	51.8	13.9	34.3
Second showing	59.0	9.9	31.0
Third showing	64.2	9.7	26.1

exhibitions, the group gave valid reasons for such attitudes. Multiple showings with definite purposes seem worth considering when films are used for teaching.

Motivation toward generalizing.—Pupil attitudes toward fifteen generalizations pertaining to the conservation of natural resources

tended toward agreement as the film showings progressed. These generalizations were considered to be in harmony with current social thinking on the subject, and the pupils were asked to check whether they agreed with each statement, disagreed with it, or did not know about it. No direct references to the generalizations were made in the film nor by the teachers during the course of the experiment. The responses are shown in Table 2.

Several pupils experienced vocabulary difficulties in reading the statements. In case of such difficulty pupils were directed to place a question mark over the unknown words. These responses were tabulated as "Don't know." In spite of these difficulties, the average percentage of pupils agreeing with the generalizations was 12.4 greater after the third showing of the films than after the first. More decisive data relative to this generalizing motivation of the instructional sound film should be obtained, however, before such a characteristic can be definitely accepted and objectively developed in the interests of learning.

CONCLUSIONS

Sound components.—Because of the character of the pupil population tested and the limited number of data obtained, few generalizations can be made at this time. However, subject to further investigation, the following observations are recorded with respect to pupil evaluation of the sound-film components investigated in this study. (1) The pupils were sensitive to environmental sounds in the film, but the relation of multiple showings to such sensitivity is not clear. (2) The pupils were sensitive to voice qualities of the narrator and were able to describe characteristics which appealed to them. (3) Pupil understanding of the vocabulary used by the film narrator tended to increase with additional showings of the film. (4) No pronounced sex differences were shown in the selection of sounds that were most interesting. Both sexes reacted to similar sound patterns. (5) The pupils were practically unanimous in preferring sound to silent films, and they gave practical, valid reasons for their preferences.

Visual components.—(1) The relation between pupil responses to general scene descriptions and the number of times the film was

viewed was not determined satisfactorily. (2) Pupil ability to detect extrinsic scene detail increased with each showing of the film, but there was slight improvement in ability to detect intrinsic scene detail. (3) The pupils considered that the scenes were relatively free from objectionable features, although several emotional reactions to scene elements were recorded. (4) The pupils indicated a pronounced desire to have more than one showing of the film for study purposes.

Audio-visual concept components.—(1) Convincing evidence was obtained that the pupils acquired additional audio-visual concepts with successive showings of the film. Such findings are believed to be important for the future development of techniques of using the medium.

Generalizing motivation components.—(1) With each showing of the film there was a tendency for more pupils to agree with generalizations considered important by adult students of conservation, although these generalizations were not dealt with directly by the film nor taught by the teachers. This finding is considered significant in light of the analysis of the sound film described in the beginning of this report.

LANGUAGE AS A SOCIALIZING AGENCY

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STAGES IN SOCIALIZING A CHILD

A CHILD at birth is potentially a social animal, possessing gregarious urges, powers, and desires. He is born into a social climate as well as into a physical climate. The social climate conditions him in language and in ideas, religion, politics, ethics, and all other aspects of his spiritual life. Roughly speaking, the task is to convert this individualistic animal into a well-balanced, social human being by the time he becomes an adult. This task is a tremendous undertaking, and the wonder is that it is accomplished as successfully as it is in most cases. Certain stages in the process of socialization may be pointed out.

First stage: personal.—Kanner¹ states that the first stage is the dependent or highly personal period. In the first fifteen to eighteen months the child is almost totally dependent on those who care for him. The actions of the child are largely governed from within the organism. Visual adaptation, in the form of winking and contraction and dilation of the pupils of the eyes, is observable the first day of life. Within two weeks the eyes follow moving light. Gradually the child develops muscular co-ordinations, and the senses of touch, taste, smell, and hearing expand. At first the child is without language.

After about a week, the infant's crying assumes meaningful modulations indicative of discomfort, hunger, sleepiness, or rough handling. The next step towards linguistic expression occurs at approximately four months in the form of vocalization, coincident with the first sounding of loud laughter. At about nine months, monosyllables are coupled together to form words, such as "mama," "papa," or "dada." At one year, the vocabulary consists of at least three words, at eighteen months of about five words. It is then that the sounds,

¹ Leo Kanner, *Child Psychiatry*, pp. 31-32. Springfield, Illinois. Charles C Thomas, 1935.

at first meaningless, are beginning to be associated with persons or objects, indicating the onset of verbal symbolization, or "language," as a means of communication. . . .

Thus, at the end of approximately the first eighteen months of life, the normal child has acquired the necessary sensory, motor, linguistic, emotive, orientative, and adaptive equipment to make him ready for the task of domestic socialization.¹

Second stage: domestic—The period of domestic socialization comprises the rest of the preschool age, from eighteen months to about four or five years. During this period the child's sensory powers become more acute and discriminating, his locomotive powers come more under control and direction, and his personal habits and social relations with the family are developed and expanded.

So far as language is concerned, the child acquires a hearing and a speaking vocabulary suited to simple conversational needs. His mastery of verbal symbols, once started, progresses with astonishing rapidity. From the passive hearing of words he develops an understanding of words heard. The hearing vocabulary increases, as it should, more rapidly than the speaking vocabulary.

In the child's acquisition of a particular language the social stimuli supplied by his surroundings are most important. A Chinese child brought up by an English-speaking family will speak English as readily as an English child, and vice versa. A parent *feeds* language to the child as he feeds the child physical nourishment; and, just as a child refuses to eat unless he is hungry or to drink unless he is thirsty, so he will not learn language unless he feels a powerful need and urge to express himself more adequately than with signs alone. We may speak of this need as "language readiness." "Readiness" is an important consideration in teaching anything to anybody at any time.

Fortunately every normal child possesses this appetite for mental activity, this "readiness for language," as well as the necessary speech organs to make oral expression possible. It is easy, therefore, to feed (or teach) him language, and the parents proceed to do so both consciously and unconsciously. Incidentally and often systematically they teach the child how to imitate the sounds that he hears

¹ *Ibid*, pp. 32-33.

most frequently. Wise parents do not depend on chance alone; they teach the child both what to say and how to say it. Possessing the power to acquire a language and the need for doing so, the child responds to this stimulating social conditioning and gradually learns a particular language, which is appropriately called "the mother-tongue." By the time the child is ready for school, he has two vocabularies: (1) a *hearing* or *understanding* vocabulary, which he acquires from others, and (2) a *speaking* vocabulary, consisting of that part of his hearing vocabulary which he can actually use in speech.

Much depends on the richness of this early preschool environment. Every first-grade teacher has been struck by the difference in the hearing and the speaking vocabularies of beginning children who may not differ widely in native abilities. As the psychologist would say, they have been conditioned differently—in heredity; in speech organs; and in their environment of ideas, ideals, attitudes, and appreciations of all phases of life. The hearing and the speaking vocabularies of some children are five to ten times as large as those of other children. Consequently neither children in the first grade nor those in later grades should be considered equal either in capacity or in achievement. Each child must begin at his own level and be educated in accordance with his powers, interests, and needs.

During the domestic stage of socialization the child's mental growth is gradual but nonetheless remarkable. The child begins to think for himself, to ask for food when he is hungry, or to rebel when interrupted at a pleasurable pursuit. The desire and the need for thinking create a readiness for language symbols. At about two years of age the child begins to follow directions, to name objects and actions, and later to "wonder" and to "want to know." As Piaget¹ says, he wants to know the whys of casual explanation, the whys of motivation, the whys of justification, the whats, the whens, the hows. The knowledge thus obtained is, of course, unsystematic and fragmentary, but it slowly prepares the child for the organized mode of school information which soon follows.

Gradually the child is weaned from his dependence on the home

¹ Jean Piaget, *The Language and Thought of the Child*, pp. 162-238. Translated by Marjorie Warden. New York: Harcourt, Brace & Co., Inc., 1926.

and its environment to a period of communal living, just as earlier he was weaned from the personal socialization of the crib period into active home life.

Third stage: community life.—The third stage, which involves the largest responsibility of childhood life, begins with the extension of the child's contacts into the community texture at about four or five years of age. Simple steps in this direction have occasionally been made before. The child has been taken for visits to relatives and neighbors, has gone on walks and rides, has visited stores and church, and perhaps has attended the circus or the movies. His social horizon expands. The child, aside from having his well-established position in the family, enters into a number of other circles, in which he assumes certain functions. Soon, in addition to "my daddy" and "my mother" and "my brother," he tells of "our house" and "our yard" and "our dog"; he then adds "our street" and "our block" and "our neighbors"; and a little later, "our class," "our school," "our teacher," "our minister," "our ball team," "our club," etc. The child has grown community-conscious. The school with its classes becomes a highly important factor in his life. The play activities become more and more organized and assume the value of recreation and relaxation from work.

In the earlier years of this period the child thinks and acts more egocentrically than does the adult. He shares his intellectual life with others less than does an adult. True, when children are together, they seem to talk to one another about what they are doing a great deal more than do adults, but for the most part they are only talking to themselves. Adults, on the contrary, keep silent for longer periods about their actions, but their talk is much more socialized. Egocentrism must not be confused with secrecy. Reflection in the child does not admit of privacy; he usually reflects out loud.

This fact, if it is accepted as a fact, has important implications for language-teaching. The teacher should utilize the child's desire for speech and allow as much freedom as possible. At the same time the process of socializing the child must be continued. The rights of others must be made apparent to him. He must learn to be courteous to others, to listen well, to take orders and directions kindly and thoughtfully, and to play his part as a member of the group without

too much egocentrism. It is no easy process thus to tame him or, rather, to induce him to socialize himself; in fact, few adults have been thus tamed. Perhaps few are really capable of being highly socialized and of thinking first of others.

In this stage of community life the child acquires the need for two additional vocabularies. The hearing and the speaking vocabularies meet all the child's needs until about the time he goes to school, where he begins to acquire an eye, or *reading*, vocabulary and a muscle, or *writing*, vocabulary. The acquisition of a reading vocabulary is, at first, a slow process, but it proceeds rapidly after the first few weeks. The beginning school child may possess from two to four thousand words in his hearing and speaking vocabularies without knowing how to read a single word. On the other hand, another child in the beginning class may know less than three, four, or five hundred words.

Here is the real justification for the use of phonetics in the primary and later grades. The primary purpose of phonetic training is to teach the child to speak clearly and distinctly. It is not an aid in reading, except in oral reading. To hear and to speak clearly and distinctly are at least as valuable accomplishments as are the abilities to read and to write. Furthermore, reading and writing follow hearing and speaking, and part of the vocabularies of the ear and of the tongue are slowly acquired by the eye and by the muscles of the arm and the body.

The fourth vocabulary, as already stated, is the writing, or muscular, vocabulary. It is always acquired last and is based on all the preceding vocabularies. That is, a spelling word is not acquired unless the child masters its sound (hearing), its pronunciation (speech), and its visible form and shape (seeing), and usually its muscular formation (writing). That is what the child means when he says, as he often does in speaking of the spelling of a word, "It doesn't sound right," or "It doesn't look right."

Thousands of words in the hearing, the speaking, and the reading vocabularies are rarely used by a child or an adult in his writing vocabulary. For example, by the end of the eighth grade a normal child will possess a reading vocabulary of more than thirty-five thousand words, and some children will have as high as forty

thousand words. Few children, however, will be able to spell, or need to know how to spell, more than five to six thousand words. Hence, great care must be exercised in selecting from the hearing, the speaking, and the reading vocabularies the words that should be emphasized in spelling. This smaller group of words constitutes the *fundamentals of spelling*.

How far shall education in language go? Shall it be extensive or intensive? Let us look at the facts. Some students estimate the speaking vocabulary of the illiterate common laborer to be as low as five hundred to a thousand words. This estimate is probably too small, but in any case the vocabulary is far too limited. The reading vocabulary of a college graduate is perhaps fifty thousand words, but his spelling vocabulary is not more than a fifth as large. Probably the average boy or girl by the end of the eighth grade can master fifty thousand words in his hearing vocabulary, thirty-five thousand each in his speaking and reading vocabularies, and five thousand words in spelling. The words in the spelling vocabulary he can write with an accuracy of 90 per cent or more if his attention is centered on the common words and is not scattered over from ten to twenty thousand words chosen from a reading vocabulary. What he can master in reading, speaking, and hearing is much more difficult to determine. In fact, nobody knows exactly, but the writer dares to risk the estimates just given.

Fourth stage: vocational socialization.—With the onset of puberty, at the ages of twelve to fifteen in girls and fourteen to seventeen in boys, the child begins to think in terms of vocational preparation. He is no longer content to be a consumer only; he desires to produce, to hoe his own row, to carry his own load—in short, to be independent. For this reason he should be given many opportunities to rely on his own resources in acquiring domestic habits, such as those related to the care and the selection of clothing and the care of property, and in adjusting to social requirements, such as making friends, fighting his own battles, and being considerate of others without becoming too submissive or too aggressive. As new needs and new desires arise, language becomes increasingly important and reliance on thought increases.

HOW IS LANGUAGE LEARNED?

The answer to the question of how language is learned depends on one's definitions of teaching and learning. In general there are three ways in which to learn. The first is the trial-error-success method. Animals learn in this manner. Faced by the necessity of action, an animal tries a large number of activities at random and follows the course that is successful. The method is characterized by a great many trials, a great many errors, and a few successes—hence its name. Left to his own devices, a very young child learns chiefly in this way. The second method of learning is by imitating. The child sees another do something, and he tries to do the same thing in the same way. Children imitate as naturally as they breathe; hence their commendable ability to mimic and pantomime the actions and the speech of their elders. These two methods of learning may be called "spontaneous activity" and "imitative activity." The third method of learning is the one which psychologists term the exercise of "free ideas," or *thinking*.

Thinking is instinctive with the child just as are the other two methods of learning, but highly organized thinking depends on ability, on maturity, and on size of vocabulary and experience in manipulating it. The power to intellectualize grows slowly, however, and is preceded by a great deal of dynamic, or spontaneous, and imitative activity. For example, in playing a new game or in making something that he has never before made, a person uses all three methods of learning. First, he plays the game or makes the thing, or at least attempts to do so. Then he replays and remakes the thing over and over again as his skill increases; he learns by doing and redoing. Rarely does anyone learn anything by first memorizing the rules, unless the rules are very simple indeed.

Basic character of dynamic experiences.—It is the recognition of this fact that has led modern educators to base intellectual activities on dynamic activities. Gradually they have been forced to recognize the nature of learning and to adjust teaching methods to it. Led by Dewey, modern educators believe in activity, dynamic and purposeful, as a basic necessity in learning.

Teaching, thus defined, implies conditioning the child so that he wants to, wills to, and is eager to learn. So conceived, teaching be-

comes a motivating, kindling, guiding process rather than a mere fact-pouring, dictatorial process. Learning is a necessary part of teaching; the two are component parts of the same activity. When so viewed, "caught" and "taught" are complementary. Thus a late report on the teaching of English is purposely entitled *An Experience Curriculum in English*. The report begins its statement with these significant words:

Experience is the best of all schools. Certainly no one learns so thoroughly, and few learn so rapidly, in any other. And experience need not be a dear school, if it is competently organized and is conducted by a capable teacher who illuminates each situation in prospect and in retrospect. School and college curriculums should consist of experiences. The school of experience is the only one which will develop the flexibility and power of self-direction requisite for successful living in our age of swift industrial, social, and economic change. To inculcate authoritarian beliefs, fixed rules of conduct, unreasoned and therefore stubborn attitudes, is to set our youth in futile and fatal conflict with the forces of modern life. By meeting situations, modifying conditions, and adapting themselves to the unchangeable, our boys and girls will learn to live in a dynamic and evolving world. Today, more than ever, the curriculum should consist of experiences.¹

True, many educators seem to question this statement. They believe in blind discipline. They hold that the best preparation for complex civilization is obedience to authority. Perhaps the prevalence of this conception makes us easy prey for demagogues and dictators.

An Experience Curriculum in English was written by teachers of English for teachers of English. These writers desire children to think about their own experiences and the experiences of those whom they observe. Experience is of little value unless it is thoroughly examined and explored. Experience alone or intellectual activity alone will not do. Nor will a program of rethinking of other men's thoughts be satisfactory. The report continues:

Truly rich living, any *real* living, includes much more than such purely intellectual activity or (and) the practice of technical skills. Normal living is a composite of dynamic experiences in which the will, the feelings, *memory*, and

¹ W. Wilbur Hatfield (chairman), *An Experience Curriculum in English*, p. 3. A Report of the Curriculum Commission of the National Council of Teachers of English. New York: Published for the National Council of Teachers of English by D. Appleton-Century Co., Inc., 1935.

reason are all exercised as a single organism. Such typical life-experiences as running an errand for mother, organizing a baseball team, giving a party, producing a play, conducting an election campaign or a community drive, all have other elements quite as prominent as the intellectual. It is chiefly of such materials that the warp of life is composed. Unaccompanied by the woof of intellectual activities such as fact-learning, reflection, and acquisition of needed skills, these activities may remain separate strings, lacking the beauty and greater usefulness which a well-woven fabric might have. So there is need for school! On the other hand the academic exercises in spelling, using effective detail in narrative, noting the effect of the similes in *Sohrab and Rustum* are, if not interwoven with these emotional, volitional threads of life, just so much woof without any warp, sure to fall to pieces the moment our grasp is relaxed. *The school must manage a functional combination of the dynamic experiences of active life and the intellectual activities which have been teachers' chief concern.*²

Speech, the basis of all language.—It has been stated earlier that learning to hear and to speak effectively must precede the teaching of reading and writing. The child should talk well before he is expected to read well or to write well, since oral expression is the foundation of thought and communication.

Composition is, first of all, thinking, as the derivation of the verb "composes" indicates. One composes as he thinks and hears, as he speaks, as he reads, and as he writes. The teacher of language is, therefore, a teacher of thinking. Thinking is not limited to reproducing or reciting facts gleaned from a textbook. Thinking is reorganizing and reconstructing experiences or facts based on past experiences. It is necessary, therefore, to allow children to be interested in the simple, homely things of their everyday environment: to write about them, to talk about them and to listen to others talking about them, to read about them. Further, it is necessary for children to reorganize their thoughts as they reflect upon what they have experienced.

If you would foster the gift of language in the child, throw out the formal, rote reproduction of lessons and introduce the happenings and the observations of everyday life. The sensory life of the child is a rich field, but the teacher must stir the child's imagination if the latter is to make use of his sensory reactions in attacking new experiences and ideas.

² *Ibid.*, pp. 11-12.

INTELLIGENCE QUOTIENTS OF RETARDED CHILDREN IN THE SAME FAMILIES

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FOR a number of years the mentally retarded children in the school system of Brockton, Massachusetts, have been tested by the Traveling-School Clinic under the direction of a state institution. Inasmuch as the Traveling Clinic has tested many children of the same families, it has become possible to study the nature and the extent of the differences in the intelligence quotients of retarded children coming from the same home.

Since children from the same families represent identical heredity and essentially the same environment, we might expect some general, if not individual, tendency for their intelligence quotients to approximate one another. On the other hand, we are faced with recent discoveries of the vast individual differences that exist even among children who have had the same nature and nurture.

For this study all children were included with one or more siblings who had been examined on the Stanford-Binet scale. In some cases the test had been administered at the same time to all members of the same family; in other cases the tests were administered several years apart. To some unknown degree, therefore, there is introduced a probable error because the intelligence quotients of mentally retarded children have been shown to vary to some degree over a period of years.¹ In spite of the fact that many of these intelligence quotients were not obtained for members of the same family at the same time, it is interesting to note the extent of the differences in intelligence among the retarded children of the same families according to the available data.

¹ a) Edward A. Lincoln, "Stanford-Binet I Q. Changes in the Harvard Growth Study," *Journal of Applied Psychology*, XX (April, 1936), 236-42.

b) W. C. Kvaraceus, "The Extent of Stanford-Binet I Q. Changes of Mentally Retarded School Children" (unpublished study).

In all, 163 children from 70 families were selected. Of these, 53 families had two children tested; 13 families had three children tested; three families had four children tested; and one family had six children examined. With these 163 intelligence quotients a total of 125 individual comparisons between siblings were possible. The mean intelligence quotient of the total group was 76.55, with a standard deviation of 12.6. With a few exceptions, all children tested were in the elementary schools or in the special classes.

The differences in the intelligence quotients of members of the same family on the Stanford-Binet scale ranged from 44 to 0. The

TABLE 1
PERCENTILE DISTRIBUTION OF DIFFERENCES IN INTELLIGENCE
QUOTIENTS OF RETARDED CHILDREN FROM SAME FAMILIES

Percentile	Difference in Intelligence Quotients	Percentile	Difference in Intelligence Quotients
90	23	40	7
80	19	30	5
70	15	20	3
60	11	10	1
50	9		

median difference was found to be 9, with a quartile deviation of 6. A more complete percentile distribution of the differences in intelligence quotients may be seen in Table 1. The mean difference was found to be 10.5, with a standard deviation of 7.8.

SUMMARY AND CONCLUSIONS

These findings suggest that it would not be practical to attempt to judge intelligence quotients of children from the performances of their retarded siblings on the Stanford-Binet scale. At the same time some general tendency was noted for retarded children of identical heredity and essentially the same environment to remain in the same general classification. However, there may be significant differences in the intelligence quotients of retarded children from the same family and home.

NONPHONIC PRIMARY READING

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INTRODUCTION

IN A previous article¹ Tate gave the results of an eight-week controlled experiment in first-grade reading. In that study the experimental group used a special period daily for formal instruction and drill in phonics, and the control group used the look-and-say, or nonphonic, method. The conclusions were:

(1) Phonics instruction and drill, as judged by the results of the Gates Primary Reading Test, Type 1, is far superior to the look-and-say method in developing the ability to recognize words. (2) The results of Type 2 of the Gates test give a slight indication that the look-and-say method is superior to phonics instruction and drill in developing the ability to comprehend sentences. (3) Results obtained from Type 3 of the test show conclusively that the look-and-say method is superior to phonics instruction and drill in developing the ability to comprehend paragraphs of directions. (4) The use of as many as thirty minutes daily for special phonics instruction and drill leads to an unbalanced development of the abilities to comprehend words, to understand sentences, and to grasp the meaning of paragraphs.²

PURPOSE AND PLAN OF THE INVESTIGATION

The purpose of the investigation reported in this article was to determine the effect on primary reading of the total nonuse of phonics.

Procedure in the experimental group.—The class was divided into Divisions A, B, and C on the basis of ability. In none of these subgroups during the entire two years of the experiment was there ever an attempt on the part of the teacher or the pupils to sound letters.

¹ Harry L. Tate, "The Influence of Phonics on Silent Reading in Grade I," *Elementary School Journal*, XXXVII (June, 1937), 752-63.

² *Ibid.*, pp. 762-63.

Hence the experimental factor in this investigation is the total non-use of phonics.

Many devices were employed to secure correct contextual understanding and pronunciation in cases where pupils were baffled or were consuming too much time. The specific situation determined the selection of the means used. Some of the devices are described: (1) Reference was made to the illustrations accompanying the story. (2) A brief résumé of the story up to the point of hesitancy was given by the teacher. (3) The teacher read rapidly a few lines immediately preceding the difficulty. (4) The pupil re-read a sentence or two. (5) Two or three pointed questions were asked. (6) In reading the passage containing the difficulty, the teacher substituted an aurally known word of opposite meaning or a word with an absurd meaning, the right word being thus suggested. (7) In Grade II it was possible to use a word of slightly different meaning. (8) Reference was made to an analogous experience, story, or picture. (9) Questions such as the following were asked: (a) "It couldn't be anything but ——?" (b) "What would you do?" (c) "How would you feel?" (10) The word meaning was given in pantomime. (11) On failure of any one or several devices, the word was named for the pupil either by another pupil or by the teacher.

Although the pupil was always challenged to determine the word, he was never placed in a discouraging position. This procedure also prevented the breaking of the continuity of the story.

Procedure in the control group.—The control class began and continued its work according to the method that is customary in the Whitney School. This quotation from the previous article provides a description of the method:

Formal instruction in phonics was abandoned several years ago. However, the first-grade teachers have been accustomed to imparting an incidental knowledge of the more essential elements of the subject, and the pupils have been guided into the attitude of using this knowledge as an aid in pronouncing words that they have been unable to master by the look-and-say method. In other words, the criterion of "felt need" has been set up and followed.¹

¹ *Ibid.*, p. 752.

Abilities of the classes.—The groups were equated by the method used in the first experiment, which is described in the following quotation.

the groups were not equated on the basis of intelligence quotient, mental age, or other measure of ability. For several years it has been the practice at the Whitney School to establish two classes in Grade I B in September according to the following plan. All pupils of both the morning and the afternoon kindergartens are listed alphabetically as one group. The odd-numbered pupils are sent to one first-grade teacher and the even-numbered pupils to the other teacher. Entering children who have never attended kindergarten are also allocated alternately as they arrive, the memberships of the two classes thus being kept even. These classes go on into Grade I A with the same teachers. . . . the method used worked out with a high degree of efficiency.¹

TABLE 1
CHRONOLOGICAL AGE, MENTAL AGE, AND INTELLIGENCE
QUOTIENT OF EXPERIMENTAL AND CONTROL GROUPS
AT END OF FIRST SEMESTER IN GRADE I

	EXPERIMENTAL GROUP	CONTROL GROUP
All Pupils Enrolled at Beginning of Experiment		
Number of pupils	44	44
Median chronological age (in years and months)	6-8	6-8
Median mental age (in years and months)	7-8	7-9
Median intelligence quotient	111.5	111.0
Pupils Remaining for Duration of Experiment		
Number of pupils	34	34
Median chronological age (in years and months)	6-7	6-8
Median mental age (in years and months)	7-5	8-1
Median intelligence quotient	108.5	115.0

The data of Table 1 show that, so far as the factor of intelligence enters into learning, neither group held an advantage. Since the children could not be tested in groups at the beginning of the first semes-

¹ *Ibid.*, pp. 754-55.

ter of their first year and since time was not available for individual testing, these data were secured at the close of the first semester of the first year.

During the two years of the experiment each class lost ten pupils. The lower part of Table 1 contains data relating only to the thirty-four pupils in each class who were in membership for the duration of the experiment, compiled as of the close of the first semester of the first year. It is apparent that the survivors of the experimental group had a disadvantage of 6.5 points on the median intelligence quotient.

Test used.—The Otis Group Intelligence Scale, Primary Examination, Form A, was used in obtaining the intelligence quotients. For both the initial and the final tests in reading, Form 1 of the Gates Primary Reading Tests was used. Since the examinations were separated by a period of a year and a half, it was felt that there would be no practice effect. Because the median scores of the control group were the same as the maximum scores of each of the three parts of the Gates test, the New Stanford Reading Test, Form V, was also given as a final test.

The curriculum.—The basic textbooks used were *The Elson Basic Readers*.¹ Throughout the two years the teachers kept the daily reading matter, both basic and supplementary, uniform in amount, even to the number of pages read. Lack of space forbids the listing of supplementary readers. During the first year an average of 17.75 books was read, whereas during the second year the pupils covered an average of 19 books.

In both the experimental and the control groups the total daily reading time was 165 minutes divided, as was customary, into short periods.

The teachers.—Fortunately the same teachers who took part in the first experiment were available for this study. The teacher who had the experimental group in the first experiment took the control group in this investigation, and the teacher who previously had the control group took the experimental group.

Absences.—Since it is now a rule in the Chicago schools that a

¹ William H. Elson and William S. Gray, *The Elson Basic Readers*, Books I and II. Chicago. Scott, Foresman & Co., 1930 and 1936.

first-grade teacher must accompany her class through Grade II, this experiment was conducted for two years, 1936-37 and 1937-38.

The teacher of the experimental group was absent one day, and the teacher of the control group was away from school six days. Capable substitutes, who were supplied with full lesson plans and who were cautioned as to experimental procedures, were in charge of the classes.

As is usual among small children, there were many absences due to illnesses. The absence data are given for the period of the experiment and are not considered by separate years. The experimental group had a total of 883.5 days of absence, while the control group had 691.0. The former averaged 13.0 days annually per pupil and the latter 10.2.

INITIAL COMPARISON OF EXPERIMENTAL AND CONTROL GROUPS

Relative gains.—Data on the achievements of the two groups are given in Table 2. Because of the differences in function of the three parts of the Gates test, it is possible to compare the ability to recognize words, the ability to understand sentences, and the ability to understand paragraphs. The initial test was given in March, 1937, and the final test in June, 1938.

The medians of the control group on the Gates test given as the final test (3.33, 3.45, and 3.75) are, unfortunately, the maximum scores of the three parts of the Gates test. This fact means that the test was an insufficient measure of the control group. This condition impelled the investigators to administer the New Stanford Reading Test, Form V, in order to secure data that would reveal the true differences in performance. If it is assumed, however, that the reading abilities of the experimental and the control groups were equivalent at the beginning of the first semester of the first year, then it can be assumed that the differences in their scores on the initial Gates test, given at the close of the first semester of the first year, when there had been no transfers from either group, were due to the method used as the experimental factor. Therefore in the first five months of the experiment, the incidental-phonetic method was superior to the nonphonetic method in all three reading factors—word recognition, sentence meaning, and paragraph meaning—measured by the

test used. It seems reasonable to suppose, then, that this superiority of the control group would have been shown in the final scores on the Gates test if the standardized scores had gone high enough to be a sufficient test of the control group. These assumptions would seem to fit in with the findings on the New Stanford test, which show that the control group did much better than the experimental group.

TABLE 2

GRADE SCORES MADE BY EXPERIMENTAL AND CONTROL GROUPS ON GATES
PRIMARY READING TESTS GIVEN AS INITIAL AND FINAL TEST AND ON
NEW STANFORD READING TEST GIVEN AS FINAL TEST

Test	Median of Experimental Group	Median of Control Group	Difference in Favor of Experimental Group
Gates Primary Reading Tests.			
Type 1, Word Recognition:			
Initial test	1 00	2 33	-0 43
Final test.	3 31	3.33	-0 02
Type 2, Word, Phrase, and Sentence Reading:			
Initial test.	2.05	2.43	-0 38
Final test.	3.35	3 45	-0 10
Type 3, Reading of Directions:			
Initial test.	2 00	2 20	-0 20
Final test	3 55	3 75	-0.20
New Stanford Reading Test:			
Test 2, Word Meaning	3 20	3 85	-0 65
Test 1, Paragraph Meaning	3.20	3 95	-0 75

The data obtained from using the New Stanford Reading Test, Form V, as a final test only, show that in Test 2, Word Meaning, the control group had a performance 6.5 months above that of the experimental group. In Test 1, Paragraph Meaning, the control group was superior by 7.5 months. It appears to be established beyond the realm of conjecture that incidental phonics is a much better method than nonphonics in the teaching of primary reading so far as the comprehension of words and paragraphs is concerned. It is hardly reasonable to suppose that superior performances as great as 6.5 months and 7.5 months could be attributed to a difference in median intelligence score of 6.5 points.

COMMENTS OF TEACHERS

In addition to the objective data submitted in this report, the observations of the teachers are given because they are both interesting and valuable. The control-group teacher, because she was following her customary procedure, found little to mention that would throw new light on the subject, but the experimental-group teacher recorded many worth-while and illuminating observations.

FIRST YEAR

1. More than the usual amount of word drill, both silent and oral seemed necessary during the first semester. By the end of the first year it became clear, from the manner in which the pupils handled new words, that the apparent necessity for drill arose from an unwarranted anticipation of difficulties rather than from an actual need.

2. As late as April of the first year the pupils, when baffled by a word, were not helped by spelling it.

3. Throughout the first year the children had difficulty with word endings. They were uncertain unless the context very clearly indicated the form. For example: "Billy comes to school." "Billy, come to school." "He looks for a hole." "He looked for a hole."

4. Difficulties with such words as "door" and "poor," "tried" and "tired," "front" and "back," "up" and "down" would have been clarified more quickly with some knowledge of phonics.

5. During February of the first year a very interesting development became noticeable. The children began to analyze words for themselves. They became interested in discovering words within words, as work, tomorrow, gone, because. The unusual aspect of this interest was that there was never aroused a tendency to mutilate the pronunciation of the words. The attitude was one of curiosity only.

6. At the end of March there was an occasional reference to a phonetic likeness in two words. While pointing to the word "hungry," one pupil remarked, "There is 'gry' in that word, and it is in 'angry,' too."

7. The teacher refrained deliberately from asking the children how they determined and recognized words which were unfamiliar to them because she has always found that close questioning of a young child confuses him and results in inhibitions that hinder his mental explorations. Therefore the teacher cannot state the processes which the children developed in the acquisition of a feeling of sureness concerning reading.

8. The teacher is convinced, from test results and from a knowledge of the extreme interest in reading shown by the children, that it is possible, without the use of phonics, to secure reading performances in comprehension equal to the norms of standardized tests. Just where the need for phonics will arise,

if at all, is purely conjectural. Before this experiment she thought that a small amount was necessary in Grade I. Remarks of the children indicate that they are capable of working out their own methods of word recognition. They developed a pronounced ability to select and reject factors that aid in recognition. On one occasion a picture of a "large cool porch" was to be indicated by the pupil. There was a choice between the picture of a porch and that of a boy in a swimming suit diving. As there were no words about a boy in the water, words which the pupil said he knew, he concluded that the words "large cool porch," which he did not know, referred to the picture of the porch. This type of reasoning might be hindered by a dependence upon a mechanical tool such as phonics.

SECOND YEAR

Observation and test results convince the teacher that the pupils were reading with a comprehension corresponding to that indicated by the norms of a standardized reading test. They developed a high standard of careful and correct reading. They never took a chance. They either knew the word or they knew that they did not.

CONCLUSIONS

It is well for the reader to recall that the thirty-four children of the control group remaining at the end of the second year had an advantage of 6.5 points in median intelligence quotient. This group's achievements on both the Gates test and the New Stanford test were superior to those of the experimental group, and the degree to which the one surpassed the other hardly seems attributable to the small difference in the median measures of intelligence. Repetition of this experiment by other teachers might establish the conclusions on a sounder basis.

It may be concluded (1) that, without employing phonics, either formal or incidental, as a medium of instruction, teachers can secure reading performances corresponding to those indicated by the norms of standardized tests but (2) that the incidental-phonetic method is much superior to the nonphonetic method in developing the ability to recognize words and to comprehend the meanings of sentences and paragraphs.

INFERENCES

At the conclusion of the first experiment, which contrasted the effects of the nonphonetic and the formal-phonetic methods, the investigators determined to run the second experiment, which contrasts the effects of the nonphonetic and the incidental-phonetic meth-

ods, to determine whether it would be possible to rate the three methods in order of effectiveness.

Since reliable data on more than one factor cannot be obtained in any one experiment, the comparison of the three methods must rest more on logical reasoning than on numerical data. The type of reasoning employed in arriving at these inferences is similar to that which is inherent in the statement, "Since 3 is greater than 2, and 4 is greater than 3, then 4 is greater than 2."

The reader should hold in mind that, although the Gates test failed to measure sufficiently the control group at the end of the second year, it did measure that group at the close of the first semester of the first year. To the extent, then, that the conclusions of both experiments are valid, it seems probable that these inferences are relatively sound: (1) Of the three methods investigated—formal phonics, nonphonics, and incidental phonics—formal phonics is the least efficient in developing comprehension or thought-getting. (2) The main value of formal phonics lies in the field of word recognition. (3) The incidental-phonetic method is superior to the nonphonetic method in developing the ability to recognize words. (4) The non-phonetic method is superior to the formal-phonetic method in developing comprehension. (5) The incidental-phonetic method is superior to both the formal-phonetic and the nonphonetic method in developing comprehension.

SELECTED REFERENCES ON PRESCHOOL AND PARENTAL EDUCATION

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THIS bibliography, except in the case of a few items, covers the period from December 1, 1938, to December 1, 1939. The plan of selection is the same as that used in previous years, the following classes of books and articles being omitted: (1) foreign-language publications, (2) textbooks and reviews, and (3) popular articles containing little new material.

TECHNICAL AND EXPERIMENTAL STUDIES¹

119. ADAMS, SIDNEY. "Analysis of Verb Forms in the Speech of Young Children, and Their Relation to the Language Learning Process," *Journal of Experimental Education*, VII (December, 1938), 141-44.

An analysis of the first fifty verbs in recorded samples of the spoken language of four-year-old children and a comparison with those in a sample of one hundred consecutive sentences of adult speech. The present tense is used more frequently by children than by adults, the future tense less frequently.

120. AMES, LOUISE BATES. "Some Relationships between Stair Climbing and Prone Progression," *Pedagogical Seminary and Journal of Genetic Psychology*, LIV (June, 1939), 313-25.

Marked constancy of individual pattern in the performance of these acts was noted when the same children were observed over a period of time.

121. ANDERSON, JOHN E. "The Limitations of Infant and Preschool Tests in the Measurement of Intelligence," *Journal of Psychology*, VIII (October, 1939), 351-79.

¹ See also Item 226 (Shirley) in the list of selected references appearing in the April, 1939, number of the *Elementary School Journal* and Item 376 (Skeels, Updegraff, Wellman, and Williams) in the May, 1939, number of the *School Review*. Item 420 (*Child Development and the Curriculum*) in the September, 1939, number of the *Elementary School Journal* includes the following articles of significance in the field of preschool and parental education: John E. Anderson, "Child Development and the Growth Process"; John E. Anderson, "The Development of Spoken Language"; Arthur T. Jersild, "Education in the Motor Activities"; and Arthur T. Jersild and Frances Markey Dwyer, "Early Training in Routine Physical Habits."

Tests for measuring the "intelligence" of infants and young children are of little service in predicting mental level at maturity. It is suggested that these tests might be improved if terminal status instead of age progression were used as a criterion of item validity.

122. ANDERSON, L. DEWEY. "The Predictive Value of Infancy Tests in Relation to Intelligence at Five Years," *Child Development*, X (September, 1939), 203-12.

By the proper selection and weighting of test items on the basis of their correlation with intelligence-test scores obtained at the age of five years, the predictive value of tests for infants can be improved.

123. ARRINGTON, RUTH E. *Time-sampling Studies of Child Behavior*. Psychological Monographs, Vol. LI, No. 2. Columbus, Ohio: American Psychological Association, 1939. Pp. xii+194.

A survey of procedures and findings, with four appendixes and a bibliography.

124. BLACK, IRMA SIMONTON. "The Use of the Stanford-Binet (1937 Revision) in a Group of Nursery School Children," *Child Development*, X (September, 1939), 157-71.

The 1937 revision of the Stanford-Binet test provides a valuable means of assaying the intelligence of nursery-school children. Correlations between initial tests and retests were higher than those for the Merrill-Palmer test given at the same time.

125. BORGESON, GERTRUDE M. *Techniques Used by the Teacher during the Nursery School Luncheon Period*. Child Development Monographs, No. 24. New York: Teachers College, Columbia University, 1939. Pp. xiv+214.

A statistical and descriptive study of methods found most effective in handling children who present feeding problems.

126. CLARK, KENNETH B., and CLARK, MAMIE K. "The Development of Consciousness of Self and the Emergence of Racial Identification in Negro Preschool Children," *Journal of Social Psychology*, X (November, 1939), 591-99.

The percentage of Negro boys who chose a picture of a Negro boy rather than one of a white boy in response to the question, "Which is you?" increased steadily from age three to age five. When shown the same pictures and asked to identify a brother or a Negro playmate, Negro girls of corresponding ages were as likely to choose the picture of the white boy as that of the colored boy.

127. CONN, JACOB H. "The Child Reveals Himself through Play," *Mental Hygiene*, XXIII (January, 1939), 49-69.

Describes the use of a standardized play interview in gaining an understanding of the more intimate feelings and attitudes of young maladjusted children.

128. ELLSWORTH, FRANCES FULLER. "Elements of Form in the Free Paintings of Twenty Nursery School Children," *Journal of General Psychology*, XX (April, 1939), 487-501.

A statistical analysis of 612 "free" easel paintings with reference to the frequency of occurrence of such elements as borders, masses as opposed to lines, parallel lines, and arrangement of figures and masses.

129. GESELL, ARNOLD. "The Appraisal of Mental Growth Careers," *Journal of Consulting Psychology*, III (May-June, 1939), 73-75

States that virtually every case of primary feeble-mindedness can be diagnosed during the first year of life though such a diagnosis should not rest solely on a bare intelligence quotient.

130. GESELL, ARNOLD; AMATRUDA, CATHERINE S.; CASTNER, BURTON M.; and THOMPSON, HELEN. *Biographies of Child Development*. New York: Paul B. Hoeber, Inc., 1939. Pp. xviii+328.

Summaries of the developmental progress of eighty-four children, with special reference to the problem of predicting later growth from early behavioral signs.

131. HALVERSON, H. M. "Infant Sucking and Tensional Behavior," *Pedagogical Seminary and Journal of Genetic Psychology*, LIII (December, 1938), 365-430.

Wide variations in the pattern and the vigor of sucking and in the accompanying motor reactions of hands and other parts of the body were revealed by kymograph records.

132. HOROWITZ, EUGENE L. "A Dynamic Theory of Security," *Journal of Social Psychology*, X (August, 1939), 421-35.

An attempt at devising a graphic method for analyzing and classifying the feelings of security or insecurity indicated by the behavior of nursery-school children in various situations.

133. HOROWITZ, EUGENE L., and SMITH, RANDOLPH B. "Social Relations and Personality Patterning in Preschool Children," *Pedagogical Seminary and Journal of Genetic Psychology*, LIV (June, 1939), 337-52.

As the result of controlled observation by the time-sampling method, it was concluded that the organization of young children's behavior is in terms of activity versus inactivity rather than social-ethical norms as established by adults. The effect of nursery-school training was to increase active forms of behavior and to decrease inactive forms.

134. HOROWITZ, RUTH E. "Racial Aspects of Self-identification in Nursery School Children," *Journal of Psychology*, VII (January, 1939), 91-99.

Seventeen white and seven colored children enrolled in a W.P.A. nursery school were tested for their responses to the question, "Is this you?" when shown pictures of white and Negro children. When they were later asked, "Which is your brother [or sister]?" the majority of choices were in accordance with race, although there were many confusions.

135. HOROWITZ, RUTH, and MURPHY, LOIS BARCLAY. "Projective Methods in the Psychological Study of Children," *Journal of Experimental Education*, VII (December, 1938), 133-40.

A discussion of the use of such indirect forms of expression as drawing, modeling, or discussion of pictures, for the study of personality differences and mental conflicts in young children.

136. HUNT, WILLIAM A. " 'Body Jerk' as a Concept in Describing Infant Behavior," *Pedagogical Seminary and Journal of Genetic Psychology*, LV (September, 1939), 215-20.

The Moro reflex and the startle pattern are two clearly distinguishable forms of infant behavior. The proposal to include both under the single heading of "body jerk" is undesirable.

137. JERSILD, ARTHUR T., and FITE, MARY D. *The Influence of Nursery School Experience on Children's Social Adjustments*. Child Development Monographs, No. 25. New York: Teachers College, Columbia University, 1939. Pp. xii+112.

The apparent superiority in social adjustment of children in the second year of nursery school as compared with those in their first year is largely an artifact resulting from friendships carried over from the preceding year.

138. JOHNSON, MARGUERITE WILKER. *Verbal Influences on Children's Behavior*. University of Michigan Monographs in Education, No. 1. Ann Arbor, Michigan: University of Michigan Press, 1939. Pp. x+192.

A study of the effectiveness of varying types of verbal requests, commands, prohibitions, etc., in influencing the behavior of young children.

139. LEDERER, RUTH KLEIN, and REDFIELD, JANET. *Studies in Infant Behavior*. V. University of Iowa Studies in Child Welfare, Vol. XVI, No. 2. Iowa City, Iowa: University of Iowa, 1939. Pp. 158.

Part I of this monograph, "An Exploratory Investigation of Handed Status in the First Two Years of Life" by Lederer, shows that frequent shifts in apparent preference for the use of one or the other hand are the rule rather than the exception during the first year but that with advancing ages more and more children show preferential use of the right. Part II, "The Light Sense in Newborn Infants" by Redfield, shows that sensitivity to light of low intensity increases in the newborn infant after longer periods of adaptation to the dark and that the typical response to light is an inhibition of bodily movement.

140. LINDSLEY, DONALD B. "A Longitudinal Study of the Occipital Alpha Rhythm in Normal Children: Frequency and Amplitude Standards," *Pedagogical Seminary and Journal of Genetic Psychology*, LV (September, 1939), 197-213.

The occipital alpha rhythms increase in frequency up to about the age of twelve years. The amplitude of these waves increases up to about the age of two years and thereafter drops sharply until the adult average is reached at about fifteen to sixteen years.

141. MCGRAW, MYRTLE B. "Later Development of Children Specially Trained during Infancy: Johnny and Jimmy at School Age," *Child Development*, X (March, 1939), 1-19.

A comparison of the twins at the age of six years with respect to their physical, motor, intellectual, and social characteristics.

142. MAUDRY, MARIA, and NEKULA, MARIA. "Social Relations between Children of the Same Age during the First Two Years of Life," *Pedagogical Seminary and Journal of Genetic Psychology*, LIV (March, 1939), 193-215.

A classified description, based on a controlled experiment, of the development of social reactions during infancy.

143. NELSON, VIRGINIA LAFAYETTE, and RICHARDS, T. W. "Studies in Mental Development. III Performance of Twelve-Months-Old Children on the Gesell Schedule, and Its Predictive Value for Mental Status at Two and Three Years," *Pedagogical Seminary and Journal of Genetic Psychology*, LIV (March, 1939), 181-91.

Performance of eighty infants on the Gesell twelve-month developmental schedule correlated only slightly with scores on the Merrill-Palmer test at twenty-four or thirty months or on the Stanford-Binet at thirty-six months.

144. PEATMAN, JOHN GRAY, and HIGGONS, REGINALD A. "Height-Weight Variability from Birth to Five Years of Age for Children Reared with Optimal Pediatric and Home Care," *Pedagogical Seminary and Journal of Genetic Psychology*, LIV (March, 1939), 165-80.

A group of young children from superior homes averaged distinctly above Woodbury's norms in both height and weight at all ages up to five years. There were no apparent sex differences in variability.

145. REYNARD, MARIAN C., and DOCKERAY, F. C. "The Comparison of Temporal Intervals in Judging Depth of Sleep in Newborn Infants," *Pedagogical Seminary and Journal of Genetic Psychology*, LV (September, 1939), 103-20.

Progress from deep sleep to waking and vice versa is gradual rather than sudden.

146. RIGG, MELVIN G. "The International Kindergarten Union Word List Compared with Eight Spoken Vocabularies," *Child Development*, IX (December, 1938), 363-64.

Comparison of eight spoken vocabularies of children ranging in age from two to four years with the International Kindergarten Union list shows a general similarity in frequency of use. However, these vocabularies include a large number of words not found anywhere in the International Kindergarten Union list.

147. RIGG, MELVIN G. "A Superior Child Who Would Not Talk," *Child Development*, IX (December, 1938), 361-62.

A child who had a vocabulary of only thirteen words at the age of two years passed the eight-year vocabulary test in the Stanford-Binet test (1916 form) at the age of six years and ten months. Her intelligence quotient at that time was 139.

148. SHIRLEY, MARY. "Development of Immature Babies during Their First Two Years," *Child Development*, IX (December, 1938), 347-60.
Babies prematurely born appear to be more retarded in manipulative development than in intellectual grasp and social responsiveness.
149. SHIRLEY, MARY. "A Behavior Syndrome Characterizing Prematurely Born Children," *Child Development*, X (June, 1939), 115-28.
Describes a group of behavioral characteristics shown in marked degree by children prematurely born.
150. SIMPSON, BENJAMIN R. "The Wandering I.Q.: Is It Time for It To Settle Down?" *Journal of Psychology*, VII (April, 1939), 351-67.
Criticizes certain early studies by Wellman on the effect of nursery-school training on the intelligence quotient.
151. SKODAK, MARIE. *Children in Foster Homes*. University of Iowa Studies in Child Welfare, Vol. XVI, No. 1. Iowa City, Iowa: University of Iowa, 1939. Pp. 156.
This monograph describes the later development of 154 illegitimate children placed in foster-homes before the age of six months and of sixty-five additional cases placed between the ages of two and five and one-half years. It is concluded that the superior environment of the foster-homes had a profound effect on the mental development of the children.
152. SLATER, ELEANOR, with the assistance of RUTH BECKWITH and LUCILLE BEINKE. *Studies from the Center for Research in Child Health and Development, School of Public Health, Harvard University*. II. Types, Levels, and Irregularities of Response to a Nursery School Situation of Forty Children Observed with Special Reference to the Home Environment. Monographs of the Society for Research in Child Development, Vol. IV, No. 2. Washington: Society for Research in Child Development, National Research Council, 1939. Pp. iv+148.
Behavioral instability in nursery-school children is related to conditions in the home. Many aspects of behavior are considered.
153. SMITH, J. ROY. "The Electro-encephalogram during Normal Infancy and Childhood," *Pedagogical Seminary and Journal of Genetic Psychology*, LIII (December, 1938), 431-82.
The first part of this article, "Rhythmic Activities Present in the Neonate and Their Subsequent Development," shows that rhythmic electrical activity is present over the sensory-motor area at birth, whereas occipital and frontal areas show "baseline" patterns only. The second part, "The Nature of the Growth of the Alpha Waves," indicates that these waves appear over the occipital lobes at three or four months of age. Thereafter these waves undergo a progressive increase in frequency from three to four per second until the adult level is reached at about eight years. During the same period the waves also increase in amplitude and regularity. The theoretical implications of these

findings are discussed. The third part of the article, "Preliminary Observations on the Pattern Sequence during Sleep," is concerned with the pattern of the electro-encephalogram during sleep. The pattern undergoes systematic and predictable alteration during the onset and the course of sleep after the alpha waves have been well established at the age of five or six months.

154. SMITH, J. ROY. "The 'Occipital' and 'Pre-central' Alpha Rhythms during the First Two Years," *Journal of Psychology*, VII (April, 1939), 223-26.
Two distinct alpha rhythms which are of different frequency and which originate in different regions of the brain appear in the electro-encephalograms of the normal infant. The precentral waves are present at birth and show little change in frequency until about the age of fifteen months. The occipital waves do not appear until about the age of four months and show their most rapid increase between four and nine months.
155. SMITH, MADORAH E. *Some Light on the Problem of Bilingualism as Found from a Study of the Progress in Mastery of English among Preschool Children of Non-American Ancestry in Hawaii*. Genetic Psychology Monographs, Vol. XXI, No. 2. Provincetown, Massachusetts: Journal Press, 1939 Pp. 119-284.
Children of non-American ancestry in Hawaii are much retarded in the use of English. Mastery of the language is aided by attendance at an English-speaking nursery school or kindergarten.
156. VALENTINE, C. W. "A Study of the Beginnings and Significance of Play in Infancy. II," *British Journal of Educational Psychology*, VIII (November, 1938), 285-306.
The play of infants under three years of age is described, and its theoretical significance is discussed with special reference to the dangers of oversimplification on the one hand or the riding of hobbies on the other. Illustrative examples from the author's records of his own children are given.
157. VAN ALSTYNE, DOROTHY, and HATTWICK, LABERTA A. "A Follow-up Study of the Behavior of Nursery School Children," *Child Development*, X (March, 1939), 43-72.
The Haggerty-Olson-Wickman Behavior Rating Scale was used to compare the behavior of elementary-school children who had previously attended nursery school with their own earlier standing and with that of the general school population.
158. WAGNER, ISABELLE F. "Curves of Sleep Depth in Newborn Infants," *Pedagogical Seminary and Journal of Genetic Psychology*, LV (September, 1939), 121-35.
Curves of depth of sleep are highly irregular during the first ten days of life, but there is some tendency toward increasing regularity of the curves toward the end of the ten-day period.
159. WELCH, LIVINGSTON. "The Development of Discrimination of Form and Area," *Journal of Psychology*, VII (January, 1939), 37-54.

By means of a conditioning experiment with candy as the unconditioned stimulus, an attempt was made to establish discrimination between plates of varying forms and areas in children between the ages of one and five years. It was found that discrimination on basis of "large" and "small" could apparently be made at an earlier age than discrimination of shape but that the concept of "middle-sizedness" was relatively late in appearing.

160. WELLMAN, BETH L. "The IQ: A Reply," *Journal of Psychology*, VIII (July, 1939), 143-55.

A reply to Simpson's criticism (see Item 150 in this list) of an earlier article by the author on raising the intelligence quotient by means of preschool training.

161. WOLFLE, DAEL L., and WOLFLE, HELEN M. "The Development of Co-operative Behavior in Monkeys and Young Children," *Pedagogical Seminary and Journal of Genetic Psychology*, LV (September, 1939), 137-75.
It is concluded that formal language is essential for the type of co-operative behavior studied.

NONTECHNICAL BOOKS AND ARTICLES PRIMARILY FOR PARENTS
TEACHERS, AND WORKERS IN THE FIELD
OF PARENT EDUCATION

162. BRYSON, LYMAN. "Methods in Adult Education," *Teachers College Record*, XLI (October, 1939), 51-57.

Methods of teaching must be adapted to the characteristics of those who are to be taught. Because adults differ from children, the methods of teaching best suited to the capacities and interests of adults also differ from those that have been developed for younger students.

163. GRUENBERG, SIDONIE MATSNER. "Family Life—Then and Now," *Child Study*, XVI (November, 1938), 44-46, 74.

Discusses the changes in attitude toward parental authority and child obedience that have taken place during the past century.

164. LEVY, JULIUS. "An Experiment in Training Nurses To Help Mothers in Preventive Mental Hygiene," *Mental Hygiene*, XXIII (January, 1939), 99-106.

Visiting nurses were trained to give instruction to prospective mothers and to mothers of young children on the mental-hygiene aspects of child care. Follow-up work was done as the children grew older.

165. LORGE, IRVING. "Psychological Bases for Adult Learning," *Teachers College Record*, XLI (October, 1939), 4-12.

A well-organized account of the changes that occur with age in respect to sensory functions, intelligence-test scores, attitudes, and interests, and the bearing of these changes on the methods most suitable for use in the education of adults.

166. MEYER, ADOLF. "The Bridge between Parent and Scientist," *Child Study*, XVI (November, 1938), 38-39, 80.

There is need for more reciprocity between parents and scientists in order that the findings of the latter may be made more intelligible to the former and that the validity of scientific data may be put to practical test.

167. OSBORNE, ERNEST G. "Widening Horizons in Parent Education," *Teachers College Record*, XLI (October, 1939), 25-33.

A discussion of the changes during the past fifty years in scope and content of parent-education programs.

168. O'SHEA, HARRIET E. "A Psychologist in a University Nursery School," *Mental Hygiene*, XXIII (January, 1939), 40-48.

Cites a number of incidents illustrating the role of the nursery school in the mental-hygiene program of a modern university.

169. PILPEL, CECILE. "Study Groups, 1888-1938," *Child Study*, XVI (November, 1938), 47-48.

A comparison of the types of questions asked by mothers attending child-study groups a half-century ago with those asked today.

170. SYMONDS, P. M. *The Psychology of Parent-Child Relationships*. New York: D. Appleton-Century Co., Inc., 1939. Pp. xiv+228.

A book for specialists in parent education, social workers, and others interested in family relationships.

Educational Writings



REVIEWS AND BOOK NOTES

AN ENTHUSIAST STUDIES SCHOOL EXCURSIONS.—At the beginning of Atyeo's book, the reader meets an involved statement of the author's purpose: "to discover, analyze, and in a measure evaluate, various excursion techniques with a view to making available to teachers and administrators information which would enable them to achieve a more effective utilization of the educational opportunities which might be found inherent in the excursion technique" (p. 5).

After completing the book, the reader feels that he has received much interesting information about excursions but that this material has been presented not primarily for the purpose of making the use of the excursion more efficient but as an argument for employing excursions more extensively. In fact, the desirability of building a curriculum around the possibilities of excursions in the community is implied in one place (p. 179).

Throughout the book the topic of values is stressed. In the Introduction emphasis is given to the satisfaction that excursions give to the natural human desire for sense impressions, to the value of "actual experiences which are essential to all true understanding and appreciation," and to the "as yet unmeasured social values" (p. 5). In chapter vi the literature favorable to the more extended use of excursions is summarized, and tabulations are given of the answers made by a group of teachers to a questionnaire calling for a rating of various values of excursions submitted as a prepared list. In this chapter are segregated two unique contributions made by well-planned excursions to the achievement of educational purposes. These specific contributions are presented as (1) "interest in the immediate subject matter under consideration," which carries over to related fields, and (2) provision of "concrete firsthand experiences, which result in a direct and personal knowledge of the environment" (p. 125). The author, however, permits the impression to be given in this section of the book that, because of its great variety of values, the excursion technique readily serves almost all the problems found in education.

In the presentation of his own carefully prepared experiment, the author again points out the peculiar advantages of the excursion as compared with

* Henry C. Atyeo, *The Excursion as a Teaching Technique*. Teachers College Contributions to Education, No. 761. New York: Teachers College, Columbia University, 1939. Pp. vi+226. \$2.35.

the discussion method of teaching. A few statements regarding these results are interesting:

Although the item analysis [of the test results] does not offer any definite proof of the superiority of either the discussion or the excursion method, it does point to certain differences in the kinds of information which appear to be better acquired through the use of one or the other method. The discussion group, as would naturally be expected, has the higher record on the items definitely associated with the subject matter treated in the textbook and supplementary reading, and the excursion group the higher on the items closely related to the excursion experiences. Items involving date, or approximate size—as of a dinosaur, for instance—yield a higher score for the discussion group, probably because of the class discussion of the material read and of the notebook work; as do also those items which concern the location of cities, countries, and other geographical features which could be visualized on a map. The excursion group, on the other hand, scores higher on items calling for an acquaintance with the general appearance of objects . . .

It is rather difficult to draw any conclusions regarding the comparative value of the two methods in enabling pupils to interpret or to judge the significance of facts, or to draw conclusions. It seems clear, however, that the excursion group is distinctly superior in response to the items which require some interpretation of the information acquired through observation, such as the comparison of two different civilizations, comparison of different levels of art or culture, or comparison of qualities of objects (of Greek and Egyptian jewelry for example) [pp. 161-62].

The reference made to map-study raises the question of the values of other more simple and more easily furnished and managed visual aids and observation experiences in achieving the purposes claimed for excursions. None of these is discussed in detail in the book.

An interesting description of the German and English youth movements involving travel is presented. In the United States a few excursion activities are currently used, but the author emphasizes the slow development in this country as compared with the youth-travel programs in Europe. He notes that in the United States greater personal freedom is granted to young people, that there are fewer rigid traditional conventions and disciplines in the educational system, that the regular school day provides time for physical activity and play, that many American homes provide travel opportunities for young people, that many teaching methods used in progressive American schools "are closely allied with the excursion procedure and have done duty in its stead" (p. 49), and that there is a generous provision of varied "extra-scholastic activities" (p. 50). He points out the effect on excursion plans of the long distances in America. In spite of these differences in American education when compared with European systems, the author still recommends that plans similar to the European practices be adopted in this country and that a central agency be set up to promote and direct such excursion and travel plans.

Teachers and principals will find in chapters iv and v helpful material for use in planning and conducting excursions both as part of the school program and also as longer journeys supplementary to school work. These suggestions

come in part from a survey of common practice and in part from the author's mastery of the problems involved. The help given includes the appropriate purposes of excursions, planning them, the hazards involved and helpful safeguards, the direction by the teacher or guide during the observation periods, and the proper educational use in further learning of the observations made. This material makes the book a valuable contribution to American educational literature.

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ECONOMIC AND SOCIAL FACTORS IN NEGRO EDUCATION IN ALABAMA.—An influential school of historians seeks to discover the springs of social behavior in economic motives. Exponents of the theory believe that social conditions are to be traced ultimately to economic causes and that the course of history is to a large extent, if not altogether, shaped by the law of self-preservation. The reviewer dissents from this school of thought and holds, on the contrary, that racial, religious, and ideological motives, not exclusively economic in character, are at times equally potent and that group behavior is more often determined by a mixture of motives rather than by the operation of any one particular motive.

The issue is well illustrated in Bond's history of education in Alabama,¹ which is written with special reference to the education of the Negro. The author presents the economic history of the state and the history of the Negro schools in a parallel arrangement. He concludes, quite properly, that an economic system based chiefly on the raising of cotton is responsible for the slow progress of both white and colored schools. One of his later chapters is headed "Cotton plus Steel Equals Schools," a phrase which he uses, of course, in a literary rather than a mathematical sense. The fallacy of stressing the economic force to the neglect of other forces is evident if the first two terms are raised to the n th degree, thus, $Cotton^n + Steel^n$, to indicate a maximal return from production. There can be little doubt that both white and colored schools would benefit by this hypothecation. But would the result appear, one may ask, in a proportionate gain for each race, an equality of school facilities, similar schools for all, or a mingling of whites and blacks in the same schools? The history of Negro schools will involve, in the future as it has in the past, the answers to such questions. The problem cannot be regarded in the light of an inevitable social effect following in the wake of an economic cause. Too many other factors enter into the situation. All this is said not in disparagement of Bond's excellent thesis but in opposition to the well-known theory of history-writing which he has followed.

The book under review might have been improved by the incorporation near

¹ Horace Mann Bond, *Negro Education in Alabama: A Study in Cotton and Steel*. The Susan Colver Rosenberger Prize Essay, 1937, the University of Chicago. Washington: Associated Publishers, Inc., 1939. Pp. 358. \$3.25.

the beginning of a statement of the point of view and the scope of the study contemplated. The reviewer would, indeed, find no objection to the author's having stated frankly that this study is written from the point of view of a member of the Negro race, as obviously it is. While the rule of scientific objectivity might thus be violated, the best historians seldom achieve an impersonal treatment and the careful reader usually makes allowance for this frailty of human nature. In this instance the most significant revelation is to be found in a Negro's interpretation of the complicated social problem which both races face in common. The problem will be understood in its entirety when we have heard from competent spokesmen of the colored race, of whom the author is one.

The author's diction is good. His running comments on the data are shrewd and incisive. His conclusions are moderately stated, perhaps understated. The cause-and-effect relationship is not so well established in the earlier as in the later chapters, but on the whole the work is well done. It is probably the most thoroughgoing study of its type yet published.

STUART G. NOBLE

Tulane University

BASIC CONSIDERATIONS IN THE TEACHING OF ARITHMETIC IN THE UPPER GRADES.—Unlike most books devoted to the teaching of mathematics in Grades VII and VIII, *Teaching Arithmetic in the Elementary School*, Volume III,¹ contains a discussion of the basic philosophies of teaching arithmetic in any grade. Too often arithmetic for the upper grades is considered as something unlike the arithmetic of the lower grades. Morton repeats the salient points found in his books for the lower and the intermediate grades regarding the number system, the decimal system, place value, the function of zero, integers, common and decimal fractions, the elements of percentage, and the need on the part of pupils to understand numbers and the fundamental operations with numbers. In so doing, he recognizes that teachers of the upper grades should be familiar with the background of the content for those grades. This clear-cut statement of the foundations of arithmetic should also be of interest to teachers of mathematics in the senior high school.

Also, unlike most authors, Morton suggests, "A review should be something more than a hurrying over a subject again in the same way; it should be a new view and should lead to a better understanding" (p. 19). He contends that it is wrong for teachers of the upper grades to reteach arithmetic, through review, as a "bag of tricks" (p. 18). Rather, in the teaching of any topic in any grade, the material must be significant, it must have meaning, and it must lead to insight.

If Morton's recommendations for review teaching are applied to the teaching of a new topic, such as taxation, the teacher will be concerned with three things: (1) that the social significance of taxation is understood, (2) that the numbers

¹ Robert Lee Morton, *Teaching Arithmetic in the Elementary School*. Vol. III, Upper Grades. New York: Silver Burdett Co., 1939. Pp. x+470 \$2 80.

and the ways in which they are used have meaning, and (3) that pupils sense the relation between the mathematics of taxation and that of other topics which employ the same mathematical principles. In other words, Morton's plea for "significance," "meaning," and "insight" would elevate the teaching of mathematics in the upper grades from the level of mechanistic learning to that of relational thinking.

In two chapters entitled "The Arithmetic of Business" and "The Arithmetic of Daily Living," Morton presents pertinent facts, social and mathematical, about such topics as banking, real-estate investments and mortgages, inventory and turnover, instalment buying, loan companies and their rates, kinds of taxes, travel, and the like. From this wealth of information the teacher may obtain the necessary knowledge through which significance and meaning may be given to these topics. In the earlier chapters methods are discussed which, employed by teachers, should lead children to gain insight or the power to do relational thinking.

Chapters on "Measurement" and "Mensuration and Intuitive Geometry" likewise contain valuable information which at the present time must be gathered from many scattered sources if it is to be used. In closing these chapters, Morton declares:

The arithmetic of mensuration has too often been taught by a method which is based upon the drill theory. It provides excellent opportunities for the use of methods which are based upon the meaning theory [p. 367].

Formulas for areas and volumes should be discovered as the result of a development which the pupils can at least partially understand [p. 366].

Thus, in this book a method is not described in an early chapter with the application of the method left to the teacher, but method is demonstrated throughout.

"Graphs" and "Arithmetic Shorthand—The Elements of Algebra" are also considered. In the discussions of these topics Morton indicates how the pupil may be gradually introduced to the art of symbolic thinking. The contention is made that the easier portions of algebra are easier than the harder portions of arithmetic and that certain simple elements of algebra may be very useful.

There is a theme carried throughout the book which brings otherwise discrete topics together. It appears again and again through illustrations and suggestions whereby the mathematics of Grades VII and VIII may become a system of thought rather than isolated bits of knowledge in the mind of the learner.

Finally, the value of the book is further enhanced by the inclusion of questions and review exercises, tests, and selected references for each chapter. The book is interestingly written and easily understood. It reflects the wide experience of the author both as a teacher of mathematics and as a teacher of prospective mathematics teachers.

C. L. THIELE

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ART IN THE SCHOOL CURRICULUM.—In a well-designed book¹ immediately impressive for its weight, quality of paper and printing, and its beautiful illustrations, the author attempts the feat of producing a practical guide to organizing the instructional material and the methods of art-teaching in the schools. The book is designed primarily as a textbook for students in teacher-training classes and as a reference for teachers and supervisors.

Chapters i and ii discuss the nature of art and its integral part in the present-day social, economic, and educational setup. Chapters iii and iv describe creative and directed art activities and their place in the educational process and generally introduce the ways and means of preparing courses of study. Chapters v, vi, and vii deal, respectively, with the elementary-school, the junior high school, and the senior high school program and include a general discussion of aims, methods, materials, lesson plans, and classroom procedure. Chapter viii presents practical suggestions for collecting and displaying materials of educational value in the schools. Chapter ix describes interesting but inconclusive experiments in the evaluation of art abilities. Chapter x presents, in many fields of appreciation, history, and practice, a bibliography of art books which is well annotated but neither comprehensive nor, in the reviewer's opinion, particularly well selected. Two appendixes follow, the first containing notes designed to assist in the interpretation of historic and contemporary art forms and the second a list of words and phrases for use in preparing lesson plans. An adequate index completes the book.

Aside from stimulating observations of a philosophical nature, some original with the author and many selected by him from the writings of other educators, the chief merits of the book are the numerous practical suggestions for classroom procedure, such as collection and presentation of illustrative material, and the directions for actual technical processes. The author's explanation of these common practical problems of teaching is sound and clear, and it seems to the reviewer unfortunate that these matters alone were not extended into a comprehensive handbook for the student and the teacher.

The book as a whole leaves much to be desired, for the author's ambitious attempt to deal broadly with the field of art education has made it impossible for him to deal comprehensively with any one aspect of the subject. Through an effort "to present a picture which . . . is neither philosophical nor theoretical" and which is "based on neither the traditional nor the radical point of view" (p. vii), the author has included quotations from other educators which together with his own statements form a mass of conflicting ideas from which probably only an experienced artist and teacher could extract a workable summary as a basis for a teaching program. Because of the absence of a sufficiently simple and fundamental analysis of art activity in contemporary life and a similarly clear picture of what constitutes valuable art experience in the educational process, it

¹ Leon Loyl Winslow, *The Integrated School Art Program*. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xiv+392. \$3.50.

seems to the reviewer that the many practical suggestions presented by the author lack a clear educational purpose.

In Appendix A the author's notes on art appreciation follow the tradition of most art histories in emphasizing ancient and foreign forms and allowing only a brief and necessarily superficial summary of the art of the last hundred years, in spite of the fact that this period has contributed the most to the child's surroundings and art experiences and consequently might be expected to require the most thorough and careful interpretation. Likewise, the list of reproductions of architecture and decorative art objects (pp. 116-19) contains no examples from the last hundred years. The lists of reproductions of paintings (pp. 173-77, 267-72), containing more than a hundred names, include the works of only two living American painters. In the concluding paragraph of Appendix A the author states:

Commercial art is of great social and educational value today, for it keeps the public in constant touch with the invention of new things and with improvements of existing industrial products. It also keeps us all informed regarding social welfare, and the cost and qualities of commodities. It is helping to make possible a unified, larger, and more economic social order [p. 375].

Such a statement suggests an attitude toward the nature of valuable art experience, practice, and products that should be carefully analyzed and evaluated before it is accepted as a basis on which to build an art program.

EDWARD M. FARMER

Stanford University

LOCAL HISTORY FOR JUNIOR HIGH SCHOOL PUPILS.—Yes, I have been in California, even in that southern portion of perpetual summer, and liked it. Furthermore, I escaped, and, although I could make a sizable speech about California and its wonders, I can in no sense be termed a California booster in spite of what may follow in this review.

Thank fortune I still retain enough boyish enthusiasm to like the expression "under the flag," and recent months of travel in Nazi Germany have made me even more enthusiastic over the fact that I can live, teach, and write under the Stars and Stripes.

Margaret B. Pumphrey takes us skimming along the avenue of history to see and feel the life of San Diego, California, *Under Three Flags*.¹ She has been ably assisted by Hilda Prebibus who, through her illustrations, has not only enriched the experience but in not a few instances has made vivid and real ideas which are quite impossible of expression by means of words. In short, good team work has gone into the making of this book, which should find its way into the hands and lives of many junior and senior high school pupils—and no harm will be done if some of the grownups give an evening to it.

¹ Margaret B. Pumphrey, *Under Three Flags*. Caldwell, Idaho: Caxton Printers, Ltd., 1939. Pp. 294. \$3.00.

The book is written with a great deal of charm. Not only is the story well told, but there is at times almost a poetic effect which one associates with the figurative expressions of a simple people. Miss Pumphrey really tells us the story, for we can see at once that much research and great pains have gone into her effort, but, if Hoo-na or his brother Pee-koon can phrase the thought more happily and take us more quickly into the days of long ago, then that is the way the tale is told.

San Diego and environs have existed, perhaps we might better say "flourished," under three flags: Spanish, Mexican, and American. *Under Three Flags* is written in chronological order, a major section being devoted to each flag. The units in each section are short and are so written that each may stand alone. Open the book at the beginning of any of the thirty-five units, and you will find a little treasure, told in simple, lucid sentences that even a child not yet in his teens can read. For general reading, however, this volume seems better adapted to the junior high school reader, and even older pupils will hardly shun it once they have had a taste of it.

There is history in this book, not musty tabulations but vibrant accounts of life in this important section of our country from the earliest known events right down to a thrilling account of the great observatory now in the building on Palomar Mountain. One learns of the "Big Eye" cast at Corning, New York, its long passage, the grinding, polishing, and the rest. One can, in his imagination, visualize San Diego of tomorrow or, in the light of carefully selected materials and the fine art of composition, follow the numerous social and political changes reaching back over several centuries.

It is fortunate that this book has been written. In the first place, it is written about a place that is worth writing about. Second, it gives in convenient and attractive form facts and materials which were not too readily accessible. In the third place, one finds a literary quality and a social and political poise that should be constructive in the experience of any young reader who may take it up.

This book is worthy of a reading on its own account, or the various sections may be profitably read in connection with other fields of interest which these accounts may legitimately touch.

CLYDE B. MOORE

Cornell University

SOMETHING CHALLENGING AND DIFFERENT IN JUNIOR HIGH SCHOOL HISTORY.—Seldom does one find scholarship, attractive style, simple narrative and description, and psychological approach all combined and mingled so successfully in a textbook in history as in the case of Coleman and Wesley's *America's Road to Now*,¹ a textbook for the junior high school grades.

Besides these major and general characteristics of a good book for early

¹ Charles H. Coleman and Edgar B. Wesley, *America's Road to Now*. Boston: D. C. Heath & Co., 1939. Pp. xiv+624+xxx. \$1 76.

adolescence, this publication is notable for such features as the following: its brief quotations from original sources, the placing of problems and important points of information to be stressed in the form of questions at the beginning of sections in the book, types and forms of information in the context which ordinarily are not found in books in this field and for this age of pupils and level of instruction, and excellent interpretative illustrations and pictures.

The book is divided into major units, and these, in turn, are divided into convenient and meaningful sections. An innovating feature is the inclusion of thirty-three full pages of plates (portraits, engravings, pictures) at the back of the book.

While the references at the ends of the sections cite good publications of various types and various degrees of difficulty and complexity, the references are not properly annotated and, in many cases, the writings are suited for teachers rather than for pupils of junior high school age. It would have been much better if these references, with brief annotations, had been divided into (1) pupil references, (2) some references for advanced and supplementary assignments, and (3) teacher references.

All in all, this textbook by Coleman and Wesley is one of the very best published in the past two decades for the junior high school level. It is surpassed by none. In schools in which another publication is the adopted textbook, this book would serve as a parallel textbook of added value to the pupils. As an adopted textbook it would fit in well with the very best parallel books and supplementary reading for pupils of this age.

R. E. SWINDLER

University of Virginia

PLEASANT READING.—The editors of this eighth-grade reader¹ hint at their purpose in the title, and they succinctly state their purpose in "A Note to Teachers," which they have shrewdly tucked away at the end of the book. They believe that "a pupil advances in reading power in direct proportion to the interest, understanding, and pleasure he derives from reading" (p. 635)—a statement which would be generally accepted as theory even though it might be promptly forgotten in practice. They have made, so they state, "every effort to secure material of a high standard of literary excellence which will be sure to appeal to the natural interests of the pupil" (p. 635)—a statement which must be here explored.

As I study the Table of Contents and browse through the book, I believe that the editors' assertion—or hope—concerning the strong and direct appeal of the selections is realized. The material in *Growth in Reading* is predominantly narrative; it deals with themes well within the experience range of boys and girls in America today: outdoor life, movies and radio, heroic action, explorers and

¹ Robert C. Pooley and Fred G. Walcott, *Growth in Reading*, Book II Chicago: Scott, Foresman & Co., 1939. Pp. 640 \$1.48.

scientists, American "builders," folklore and legend; and it is nearly all modern in subject and tone. Still more significant, the material is unusually simple and easy in structure, vocabulary, and style. The selections, moreover, are tightly organized into content units, so that the transition from one selection to the next is easy and the cumulative effect of all is strong. The book is full of interest to young people.

As to "literary excellence," that is something else again. Aside from the poetry, which is very good and appropriate, few of the selections are of high literary merit. The writing is clear, workmanlike, and adequate for its purpose. It is above the average of journalistic, "juvenilistic" writing—and below the level of literature. Now it may be that material of this kind is more interesting and more fruitful for youthful readers than is first-rate literary art; that question, of course, is debatable. I could wish, however, that the makers of *Growth in Reading* had not kicked fine artistry out of the schoolroom windows and then brought in at the door specimens of capable artisanship characterized as having "literary excellence." This criticism may be quibbling over words. To be more explicit: I think that the contents of this book, even if not intended for them, would be most useful for children who are below their grade in reading ability and perhaps in intelligence, emotional maturity, and cultural experience—children who therefore would not enjoy and understand the usual literary collection nor become good readers through using it. For such pupils—and no doubt their name is legion—this book is admirable.

The book is admirable also in the editorial treatment. Nearly every selection has a sensible, brief headnote; the "Things To Discuss" following the selections are pointed toward comprehension and appreciation; the reviews of the units and sections are well constructed; and the reading lists are inviting and challenging to readers. These features are now "standard equipment" in books of this kind. One feature which is more novel—and to me more dubious—is the class activity which comes within each section. For example, after two selections in the first section, "Meeting the Challenge of Outdoor Life," have been read, the class is incited to organize and carry on "An Outdoor-Vacation Bureau." This suggestion, in my judgment, is busy work, a bit more genuine and perhaps more educational than most projects; but it is based on what seems to me to be a false assumption: that "doing something about it," after one has read selections on a theme, is natural and desirable. This is neither the time nor the place to discuss the problem; all I would do is to indicate that the practice of having activities immediately following reading is based on an assumption.

The place of *Growth in Reading* in the educational program has already been indicated. The book belongs between readings in literature on the one hand and drillbooks for retarded pupils on the other. It is my own belief that, if more

books like this one were available, there would be less need for drillbooks but that intelligently compiled collections of good literature still remain basal for most schools.

New York University

WALTER BARNES

BIOGRAPHIES TO PLEASE YOUNG READERS.—Without doubt, one of the most comprehensive and authentic works of biography that have been published is *A Child's Book of Famous Composers*.¹ Being a recent publication, it has all the corrections and additions needed in many previous works of this type. Every necessary detail has been worked out in the most interesting yet simplified manner. Nothing of importance has been omitted, and the entire subject matter has been given a connected and progressive appeal to the less mature pupils.

The twenty most outstanding composers are presented in chronological order, from Palestrina to Debussy, in a way that holds the interest of the reader. The complete, simple, and appealing nature of each biography gives the entire book a most deserving place in musical literature for young pupils. Because of the well-selected photograph of each composer accompanying the story of his life and work, an atmosphere of acquaintance is created which brings the reader into much deeper appreciation of the composer's life and accomplishments than would otherwise be possible. The whole arrangement of the book is neat and artistic in every detail, even to the clear, large type of every page. The Glossary, which is of great importance in a work of this nature, is written in a language understandable to a child yet never lacking in complete finish and clearness of thought.

It is rather difficult to place this book in any specific grade as its scope and interest are so varied and wide. It could be used nicely as a reader in the upper elementary grades and as a textbook for junior high school grades. Many of the biographies could well find a place in the story periods in lower grades, where they could be read aloud by the teacher and discussed by the pupils. There is also a splendid opportunity to use the entire book as a background for story and composition work in the upper grades, and it could effectively be projected into this same field in the junior high school. The volume is the outcome of practical and varied experiences and of much careful thought and planning. There should enter into all learning a certain amount of the spirit of fun and play, but this result can never be brought about unless the pupil understands the language in which the learning is presented. This book has been carefully prepared with that thought in mind, and consequently there is scarcely any limit to its usefulness for children of any grade or age below the high-school level. The reviewer

¹ Gladys Burch and John Wolcott, *A Child's Book of Famous Composers*. New York: A. S. Barnes & Co., 1939. Pp. 184. \$1.50.

has no doubt of the usefulness and the pleasure that this book is going to bring to the children of the elementary-school grades. It is so well composed by its authors that it fills the long-felt need for biographies of this nature,

J. J. COLEMAN

Public Schools
Pomona, California

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

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BRUECKNER, LEO J., and OTHERS. *The Changing Elementary School*. The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: Inor Publishing Co., 1939. Pp. xvi+388. \$3.50.

DAVIS, HAZEL. *Personnel Administration in Three Non-teaching Services of the Public Schools*. Teachers College Contributions to Education, No. 784. New York: Teachers College, Columbia University, 1939. Pp. x+324. \$2.50.

HANDSCHIN, CHARLES H. *Modern-Language Teaching*. Yonkers-on-Hudson, New York: World Book Co., 1940. Pp. vi+458. \$2.40

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HARRIS, AUGUSTA, and KEYS, DONNABEL. *Teaching Social Dancing*. New York: Prentice-Hall, Inc., 1940. Pp. xvi+234. \$2.50.

JOECKEL, CARLETON BRUNS, and CARNOVSKY, LEON. *A Metropolitan Library in Action: A Survey of the Chicago Public Library*. Chicago: University of Chicago Press, 1940. Pp. xviii+466. \$3.00.

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- Teachers for Democracy* Written in Collaboration by GEORGE E AXTELL and WILLIAM W. WATTENBERG (editors) and OTHERS. Fourth Yearbook of the John Dewey Society. New York: D. Appleton-Century Co., Inc., 1940. Pp. xli+412. \$2.50.
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BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL
TEACHERS AND PUPILS

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- HART, WALTER W., and JAHN, LORA D. *Mathematics in Action*, Book III. Boston: D. C. Heath & Co., 1940. Pp. vi+442. \$1.28.
- HILDRETH, GERTRUDE; FELTON, ALLIE LOU; HENDERSON, MABEL J.; and MEIGHEN, ALICE. *Easy Growth in Reading.* Preparatory Books: *Our Picture Book*, pp. 30 (13×18), \$5.60 (including easel); *Our Story Book*, pp. 40 (16×20), \$6.00 (including easel). Readers: *Mac and Muff* (Pre-primer Level I), pp. 48, \$0.28; *The Twins, Tom and Don* (Pre-primer Level II), pp. 30, \$0.24; *Going to School* (Pre-primer Level III), pp. 32, \$0.24; *At Play* (Primer Level I), pp. 122, \$0.64; *Fun in Story* (Primer Level II), pp. 122, \$0.64; *I Know a Secret* (First Reader Level I), pp. 152, \$0.80; *Good Stories* (First Reader Level II), pp. 122, \$0.72; *Along the Way* (Second Reader Level I), pp. 182, \$0.88; *The Story Road* (Second Reader Level II), pp. 138, \$0.80; *Faraway Ports* (Third Reader Level I), pp. 248, \$0.92. *Workbook To Accompany "Mac and Muff,"* pp. 64, \$0.32. *Pre-primer Manuals and General Manual*, \$0.96. Philadelphia: John C. Winston Co., 1940.
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- RUGG, HAROLD. *Citizenship and Civic Affairs.* Community and National Life, Book I. Boston: Ginn & Co., 1940. Pp. xvi+610+liv. \$1.88.
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- Florida Program for Improvement of Schools: Bulletin No. 4, *Plans for Florida's School Health Program*. Prepared in Collaboration with the Child Health Committee of the Florida Medical Association and Other Interested Agencies. Tallahassee and Jacksonville, Florida: State Department of Education and State Board of Health, 1939. Pp. 92. \$0.20.
- LABRANT, LOU L., and HELLER, FRIEDA M. *An Evaluation of Free Reading in Grades Seven to Twelve, Inclusive: The Ohio State University School*. Ohio State University Studies, Graduate School Series, Contributions in Education, No. 4. Columbus, Ohio: Ohio State University Press, 1939. Pp. x+158. \$1.50.
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Educational News and Editorial Comment

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DEMOCRACY IN SCHOOL ADMINISTRATION

IN RECENT years much has been written and more said about democracy in school administration. Most of the discussion centers in the part that teachers should play in the process of control and in the ways and means by which teacher co-operation can be made effective in the management of the educational enterprise. Students of public administration and not a few outstanding industrialists are interested in the same problem.

In the conduct of any social enterprise it is necessary to understand the essential elements of the process of control—and these elements in the control process are essentially the same whether the enterprise be the governance of a state, the conduct of a business, or the administration of a school system. If there is to be democratic control, it is absolutely imperative that two principles be recognized and applied.

First, there must be a structure of authority. If there is to be division of labor and specialization in function, there must also be a structure of control. Inherent in the governmental process is the necessity of defining functions and assigning duties to be performed to the various agencies in the governmental hierarchy. The assign-

ment of duties carries with it, by necessary implication, a grant of authority sufficient to accomplish the ends desired. Authority to reach final judgment and to act must be vested in the appropriate agencies all along the line, from the state legislature to the teacher in the classroom. In other words, co-ordination of work and of workers takes place through the establishment of a structure of authority which all must respect.

But there is another principle of equal importance—a principle that is often obscured in practice. It is the principle of leadership, of shared authority, of co-ordination through loyalty to an idea and enthusiasm for a common purpose. Democracy requires that the persons in whose hands authority is placed exercise the authority in such a way as to secure a full measure of co-operation on the part of all who may be affected by it. In the day-by-day administration of any enterprise, efficiency, democracy, and wisdom require that those who possess authority to determine and to carry out policies share this power and this responsibility with those involved in carrying forward the particular enterprise involved.

This principle of shared authority, of co-ordination through the dominance of an ideal, rests in part upon respect for human personality; more fundamentally it rests upon the demand for efficiency. Those who occupy positions in the structure of authority simply cannot fail to capitalize the creative intelligence, the enthusiasm, the loyalty, and the dynamic drive which result when men and women of intelligence and good will understand a program, have a part in formulating it, and join hands in executing it.

These principles of control have a direct bearing on the role of the teacher in the control of education. Failure to apply them in industry has led to no end of difficulty between capital and labor. It would be little less than tragic if school administrators should so fail in their leadership or should be so lacking in inventiveness as to be unable to find means and ways of letting teacher intelligence, good will, co-operation, and enthusiasm filter into the control process at every point. It would be equally tragic if teachers in their necessity, or in their haste, should attempt by organized effort to force an exercise of control. In science, in philosophy, and in control we are beginning to understand the essential meaning of unity, and to intro-

duce division and conflict where co-operation and compromise are intrinsically essential would be to acknowledge defeat.

TRENDS IN PUBLIC-SCHOOL ENROLMENT

THE following significant statement with respect to trends in public-school enrolment is quoted from a recent number of *School Life*, published by the United States Office of Education.

In the six bienniums from 1917-18 to 1928-30, the enrolments increased in both elementary- and secondary-school grades each biennium. This meant a continuous increase in the grand total enrolment in the public elementary- and

TABLE 1
CHANGES IN PUBLIC-SCHOOL ENROLMENT

Periods	Elementary	High
1918-20	+458,232	+ 266,568
1920-22	+988,291	+ 672,620
1922-24	+532,712	+ 516,869
1924-26	+ 85,072	+ 367,588
1926-28	+284,215	+ 153,813
1928-30	+ 10,376	+ 488,143
1930-32	-143,173	+ 740,599
1932-34	-370,383	+ 529,135
1934-36	-372,476	+ 305,381
1936-38*	-618,950	+ 228,158
1918-38	+853,916	+4,268,874

* Data for 1938 subject to slight change in final checking

secondary-school system. Since 1929-30 enrolments in the elementary grades have actually decreased each biennium. Enrolments in the high-school grades continued to increase in greater numbers through 1933-34 than the elementary decreased and, therefore, the grand total enrolments for the public elementary and secondary schools continued to increase

The turning point came between 1934 and 1936, during which biennium the elementary decrease became greater than the high-school increase and grand total enrolments for the public-school system began to drop.

During the biennium 1936-38 these trends continued at an increasing rate, the numerical decrease in elementary enrolments being approximately three times as great as the numerical increase in high-school enrolments, resulting in a decrease in the grand total for elementary and secondary schools of over 390,000 pupils, which is a little less than the total public-school enrolment of the state of Kansas for 1937-38

In the twenty years from 1918 to 1938, the net increase in enrolments in elementary grades was approximately 854,000 pupils, which is a little less than

the total public-school enrolment in North Carolina in 1937-38. The increase in the same twenty years in the high-school grades was about 4,269,000 pupils, which is a little more than the combined total public-school enrolment in the two states having the most pupils, New York and Pennsylvania, in 1937-38.

Table 1 shows the biennial changes for the twenty-year period ending in 1938.

NEEDED REORGANIZATION IN THE STRUCTURE OF LOCAL GOVERNMENT

IN MOST American states the structure of local government, including counties, townships, and school districts, is seriously in need of reorganization. The local governmental units which we now employ for providing many of our social services had their origins in Colonial and pioneer days. This is especially true of the school district. In the early days in New England when population began to spread out from the central village to other parts of the town, the demand arose to bring the school close to the people. At first the moving school was employed to meet this demand, but later the small-district system was developed. Soon after the Revolutionary War the district system spread southward into New York and later into the western and the southern states. During the nineteenth century, school districts multiplied in great numbers, and the same was true of counties, townships, villages, and cities. In 1931-32 a study of the public administrative service revealed that there were approximately 175,000 governmental units of one kind or another in the United States. Of these, 127,000 were school districts.

In a democracy it is, of course, highly important to maintain in full vigor the spirit of local self-government. To be efficient, however, local self-government must be carried out in governmental units large enough administratively and financially to provide adequate services. Certainly, in many parts of the United States school districts are far too small whether regarded from the point of view of administrative efficiency or of financial support. It has been clearly demonstrated that efficient administrative and supervisory services cannot be maintained in the great majority of the school districts of this country as now organized. It is equally true that a great deal of financial waste is chargeable to our present sys-

tem of district organization. Most important, it is perfectly obvious to anyone familiar with the facts that the small-district type of organization contributes much to inequality of educational opportunity.

No state in the Union illustrates better than Illinois the deficiencies of the small-district system of school organization. The following statement quoted from a recent issue of the *Legislative Committee Bulletin* of the Illinois Education Association describes the situation in Illinois and sets forth a proposal for modifying it.

The most recent report of the superintendent of public instruction lists, for the school year 1938-39, 5,882 schools enrolling fifteen or less pupils (an increase of 280 schools as compared with the previous year). Of these, 626 enrolled five or less pupils; 2,483 enrolled from six to ten pupils; and 2,779 enrolled from eleven to fifteen pupils. Three thousand one hundred nine schools had ten pupils or fewer in attendance. The great number of school districts (12,015) (an increase of 58 as compared with the previous year) have assessed valuations per pupil varying in the ratio of 470 to 1. Since schools in Illinois depend upon the local taxes for 90 per cent of their support, the tremendous variation in assessed valuations per pupil produces great inequalities in educational opportunity.

Obviously there is need for a gradual reorganization of school districts into larger units of administration, support, and attendance. Such reorganization should be achieved by and with the consent of the persons affected. To facilitate this reorganization by democratic means, the I.E.A. advocates the establishment by law of a study committee in each county, elected by the boards of education and boards of school directors, meeting in convention—the committee to study and recommend means of reorganization, to hold public hearings, and to prepare maps of proposed reorganized districts. Actual reorganization would be effected by the present law. This plan has the approval of the Illinois Agricultural Association and other interested groups.

GANDHI'S SCHEME FOR POPULAR EDUCATION IN INDIA

EVERYONE who is at all familiar with the course of events in India in recent years knows of the dramatic and inspiring efforts of Mahatma Gandhi to obtain a larger measure of self-government for the masses of his fellow-countrymen. He is also the founder of an extremely significant educational movement—the Wardha scheme of education—which has as its goal the reconstruction of the social and economic life of the Indian people. The following sympathetic account of Gandhi's scheme is quoted from a recent number of the *Journal of Education* published in London.

The central idea of the Wardha scheme is that true education must be given through nonviolence. Mahatma Gandhi's plan of education is impregnated with this creed of nonviolence. This scheme is intended to give birth to a new age from which class and communal hatred is abolished, and exploitation unknown. And this kind of education will be given through crafts. This scheme is not to teach some handicraft side by side with so-called liberal education. The whole education will be imparted through some handicraft or industry. It will be an intellectual training in and through a basic craft by a process of correlation. This means that arithmetic will be learned by the children while counting the number of rounds during the winding of the yarn on the winder—that is, if spinning and weaving are chosen as the basic craft. Addition tables will be learned by placing different objects and arranging them in piles. Subtraction will be done by the same method—that is, counting out the slivers for spinning and those left over after the spinning is finished. Other subjects will be taught by the same method. For instance, the mother-tongue will be taught by naming the various tools used in the craft, describing the different processes of picking, carding, and spinning with the *takli* (a steel instrument used for winding the cotton). This can be used by very small children. While spinning, the children will sing harvest and folk songs. They will also learn the elementary principles of sanitation, hygiene, nutrition, of doing their own work and helping their parents in the home.

This system gives special consideration to primary education. It introduces compulsory education from seven to fourteen years of age. It is also an education that will help one to be self-supporting in later life, and an education which in itself is self-supporting. India is a poor country. Her wealth lies mainly in agriculture and cotton-growing. And, because the handicraft of making cloth is the only one which can be taught throughout the country, Mahatma Gandhi lays emphasis on this craft. Having the natural advantage of raw materials and the enormous man-power for specialization in that industry, her teeming millions will find a solution for unemployment. For centuries India has the tradition for this cotton industry and has been one of the chief manufacturers of cotton fabrics for the world.

A primary education which is self-supporting is open to controversy and misunderstanding. And this idea is one of the fundamentals of this new educational scheme as propounded by Mahatma Gandhi. It is the poverty of India that has made the Mahatma propose this solution so as to bring forth order from the present educational chaos. To introduce free and compulsory education in India it is necessary to find *crores* of rupees to educate her millions of children. According to the Wardha scheme children will be able to earn after the first two years: this money earned with their hands through a craft will be used toward paying the teachers' salaries. Teachers under this scheme will receive from twenty to twenty-five rupees per month. This amount is equivalent to about thirty or forty shillings a month of English money. And most of these teachers are highly qualified. Under this new scheme teachers will be specially

trained for teaching. The course is three years. The selected candidate will not only have to acquire an adequate and practical knowledge of a handicraft, but also the art of correlating various other subjects with the basic craft. The child must learn his craft scientifically, knowing the whys and wherefores of every process.

The Wardha scheme of national education has a close relationship with life. The syllabuses have been planned so that the child may be adjusted to his environment—physical and social, and craftwork. The present system lacks this co-ordination, and the child finds it difficult to adjust himself intelligently and actively to his environment. Inherent in this national scheme is the ideal of citizenship. This aspect of education has been completely ignored in the present system. Citizenship in modern India is destined to become more and more democratic in the social, economic, and political life of the country. And this new education will bring forth a new generation with opportunities of understanding its own problems and rights and obligations. Thus will an intelligent citizen be able to repay in the form of some useful service what he owes to society. This ideal of citizenship is an important feature of the Wardha scheme of education.

Those of us who have been privileged to visit the schools at Wardha, Segaul, and Delhi, and who have watched the scheme in operation, feel that the Wardha method is the only salvation for India's masses. The children are eager about their work, intensely interested in their particular craft, and proud of their finished products. The children sing folk songs while they sit on the floor on mats spinning with their *takli*. They are without fear, and there is a spirit of freedom in the schools. At the training school at Wardha we were able to follow the whole process of cardboard-making, from the making of the paper to designing the finished goods. Whole villages have been revolutionized by this Wardha method of education. The people are regaining their prestige as citizens; they feel they have a niche in life, and they are becoming brave and self-confident by paying for their own education with their own labor. This scheme is a religion in itself—the religion of self-help.

Success is sure. In the words of a prominent educationist in India, "The true development of the mind and the heart can be only through manual labor." This is what the Wardha method is doing. During the next ten years great changes will take place in India because of Mahatma Gandhi's living faith in his vision for the betterment of his people.

THE BERKELEY STUDY OF THE DEVELOPMENT OF YOUNG CHILDREN

IN 1928 the Institute of Child Welfare in Berkeley, California, began a study of the physical and mental growth of a group of Berkeley infants. These children have been tested at regular intervals during the succeeding years with the view of gathering the data

necessary for the formulation of "an integrated picture of the growing child, showing the part that each aspect of growth plays in the development of a child's total functioning being." Although the picture is not yet complete and the investigation is still under way, much interest attaches to the results obtained up to this point. These results are reported in a monograph by Nancy Bayley, published by the University of California Press under the title *Studies in the Development of Young Children*. Chapters are devoted to "Home and Family," "Early Illnesses in Children," "Growth in Size," "The Trend of Bone Development," "The Developing Reflex Patterns," "Growth in Intelligence," "Development of Personality," and other aspects of child growth. The following paragraphs are quoted from the chapter on intelligence.

Our experiments with these children marked the first time that anyone had given repeated mental tests to a large number of infants in such a way that their mental development could be traced continuously over a long period of years. In fact, prior to 1920 no large-scale mental-test program had ever been undertaken with infants. People had simply substituted assumptions for exact scientific knowledge. They had found that, when school children were retested after an interval of time, their scores on the second test were very similar to those on the first. From this they concluded that children who appear to be intelligent when they are young will always be intelligent, while dull children are doomed to be dull until the end of their days. Our tests have shown, however, that children do not maintain the same level of intelligence throughout life. Nearly all the children in the study had periods during which their intelligence developed faster or slower than the average. The brightest child in the group at any certain age won this distinction because he had grown rapidly up to that point. He did not hold his position for long, however, as his rate of development always slowed down and another child in the group spurted ahead. The same thing can be said for those children making the poorest scores, with one exception. This one exceptional child, starting life with scores slightly above the group average, gradually fell behind until at six, seven, and eight years of age his mental rating was far below that of any other child in the group. However, at nine years there is some indication that he is catching up a little, though his scores are still very low. At eighteen months and two years of age his scores were so much like those of other children who later improved that it would have been impossible to predict either his decline or the other children's improvement.

From this evidence we must conclude that a young child's intelligence does not grow at a predictable rate. His mental rating does not remain constant and may actually show marked variations over a period of two or three years. And the younger the child, the greater the variations in his mental growth. During

these early years, when mental growth is very rapid, a child's relative position in a group fluctuates more than it does in later years, when growth in all children is much slower. From our tests we have learned a very valuable lesson. We know now that those people were wrong who assumed that they could take a child's score on a mental test and from it successfully predict his future intelligence. Our observations have shown that a mental test's principal value is as a measure of a child's present mental status, and not as a prophecy of future development.

Once we had established the fact that rates of mental growth are variable, we searched for factors which might explain these variations. We checked mental growth against record of past illnesses, ratings of health, measures of physical growth, and ratings of bone maturity—but found no relation between them. We did discover one factor, however, which seems to be related to mental growth. That is the parents' education. After the children were eighteen months old, the correspondence between their intelligence-test scores and the extent of their parents' education definitely increased. It is notable that this increasing correspondence does not show up until the child is old enough to talk. From our data, we cannot be sure whether this increasing correspondence is due to (1) the cumulative effect of better training provided by better educated parents; (2) the increasing similarity between the kinds of intelligence sampled in children's and adults' intelligence tests—the nonverbal intelligence of the early months may be essentially different from the more verbal and abstract intelligence of later years; or (3) delayed biological inheritance from the parents (assuming that the better educated parents are also innately more intelligent). The choice of these possible explanations remains a matter for further research. We can conclude, however, that scores made in mental tests during infancy are of no value in mapping out a child's future career or in selecting children for adoption. Knowledge of the education or intelligence of the child's parents appears to be a better indicator of a child's future abilities.

COURT DECISIONS ON CURRENT ISSUES IN EDUCATION

EACH year the higher courts of this country hand down several hundred decisions dealing with practical problems of school organization and administration. For the past eight years these decisions have been summarized annually in the *Yearbook of School Law* edited by M. M. Chambers and published and distributed by the American Council on Education, Washington, D C. The latest of these publications (*The Eighth Yearbook*) contains a mass of information of great practical value to school administrators and teachers and of interest to the lay public as well. Chapters are devoted to such matters as the rights of pupils and parents, the employment

and dismissal of teachers, tenure of teachers, and the tort liability of school districts and of the teaching personnel.

Two aspects of teacher tenure are of particular interest and importance. The first of these is the right of school boards to abolish positions of teachers on tenure and thereby to terminate the employment of teachers even though they have tenure status. This problem may be expected to become more acute in the future. Already the declining birth-rate has resulted in a marked falling-off in enrolments at the elementary-school level, and in some communities high-school enrolments appear to have reached a peak. Part of the decrease in enrolment may be taken care of by reducing the class size, but it is also likely that many boards of education will want to reduce the number of teachers. As teacher-tenure statutes are now drafted, they do not afford teachers much protection under such circumstances. The courts have commonly held that legislatures, in enacting teacher-tenure legislation, had no intent to limit in any way the right of school authorities to determine what should be taught or to determine the positions which efficient administration of the school system might demand. Statutes providing for permanent tenure are to be interpreted as "intending only a regulation of dismissal for causes personal to the employee."

"Tenure for Teachers," a chapter prepared for *The Eighth Year-book of School Law* by Daniel R. Hodgdon, cites some cases involving tenure which were decided by the courts. From this chapter we quote:

Two school districts in Pennsylvania, because of economy and decrease in number of pupils, consolidated, and a new joint school board was elected. A supervising principal of one of the districts, on tenure, was notified by the new board that his employment was terminated. He claimed that his dismissal was illegal. The court held that where there is a reduction in the number of pupils and where economy is necessary for the general welfare, a teacher, even though under tenure, may be dismissed.

A board of education in Pennsylvania abolished all kindergarten classes, in one of which there was a teacher on tenure. She claimed that the dismissal was illegal, but the court held that "when an entire department is lawfully abolished for valid reasons, which may include financial ones, in the interest of a more efficient system, the teachers in that department can be dismissed."

A teacher under tenure in Pennsylvania was employed to teach academic subjects for which he was certificated. Because of the great demand for commercial

courses, additional commercial teachers were appointed, and his position was abolished, along with a number of positions of teachers of academic subjects. He claimed tenure and demanded a contract even though there were no pupils to take his courses. The court held that a school board was authorized to terminate a contract of a teacher who had a valid contract when the tenure act became effective, where there was a substantial decrease of students in courses taught by him, which decrease was caused by the establishment of a commercial department in the school, notwithstanding that there was no decrease in the student population as a whole.

A Pennsylvania teacher who had served in a school system for nine years was elected to be a "permanent supply teacher" in 1936. In May, 1938, she was notified by the board that her services were no longer required. No charges were preferred, and no formal hearing was held. Upon appeal, the court found that this teacher's contract was within the tenure act, and that the abolition of the position was wholly for the purpose of dismissing the teacher because she was a nonresident, and that there was no legal ground for discontinuing her employment. The board was ordered to reinstate the teacher.

A teacher under tenure in California was assigned to a position as school librarian. One year later the position was abolished. The teacher was licensed and qualified to teach any of the subjects of a high-school curriculum. At the time of her dismissal, there were twenty-one probationary teachers employed in the system. The court held that when a position is abolished, a person who has acquired a permanent-tenure status as a teacher is entitled to preference over a probationary teacher if the permanent teacher is capable of teaching the subjects taught by the probationary teacher.

Another problem of special interest to many teachers and some school boards has to do with the right of the board of education to dismiss teachers for marriage where the teacher has permanent tenure. Again we quote Dr. Hodgdon:

A teacher under tenure in Louisiana was married in July, 1937. The school board had passed a resolution prior to her marriage which prohibited female teachers who were married from being employed. Acting under the bylaw, the board dismissed the married teacher, who thereupon brought suit for a determination of her rights. The court held that the teacher had been improperly discharged since the board had no power to dismiss teachers for marriage. She was accordingly entitled to be reinstated with salary from the time of her illegal dismissal.

In Wisconsin an efficient female teacher, who had taught the required number of years to gain tenure, married during the school year of 1937-38 and was dismissed May 9, 1938. The court held that a statute providing for permanent tenure of teachers during efficiency and good behavior does not authorize the

discharge of a woman teacher who has served the requisite probationary period nor does it give a board the right to refuse to re-employ her because of marriage.

Another Wisconsin decision holds that under a statute providing for permanent tenure of teachers during efficiency and good behavior, a teacher who had served the requisite probationary period and whose efficiency and good behavior were unquestioned, could not be refused re-employment because of her marriage.

A GUIDE TO THE USE OF COMMUNITY RESOURCES IN THE ELEMENTARY SCHOOL

IT is now generally recognized that every community should serve as a laboratory for the work in the social studies conducted both in the elementary school and in the high school. First of all, teachers themselves should know their community, its resources, the essential elements in its economic life, and its main social problems. Teachers require both time and insight to arrive at an understanding of the community, and it is perhaps even more difficult to make the study of the community an integral part of the school program. It is easy, of course, to make trips and excursions, but to lay hold of the understandings appropriate for any particular group of children is by no means simple.

Teachers in the elementary schools everywhere should welcome a bulletin recently published by the Association for Childhood Education under the title *Exploring Your Community*. Planned primarily for the use of teachers of young children, it illustrates concretely how teachers may make use of community resources. The bulletin may be obtained from the association, 1201 Sixteenth Street, Northwest, Washington, D.C. The price is thirty-five cents.

STATE ORGANIZATIONS OF ELEMENTARY-SCHOOL PRINCIPALS

WE HAVE recently received an announcement of the organization of the Illinois Elementary School Principals' Association. It is now affiliated with the Illinois Educational Association. Elementary-school principals are expected to support the association in large numbers because no other organization in the state serves the interests of elementary education as this group is expected to do.

Illinois principals are following the lead of Wisconsin. Some time ago the elementary-school principals of that state formed an association. They now publish an official bulletin, the *Wisconsin Elemen-*

tary School Principal. During the coming summer the association will sponsor an annual conference on elementary education at the University of Wisconsin. It is to be hoped that elementary-school principals in other states where associations have not been formed may profit by the examples of Wisconsin and Illinois.

TWO USEFUL BIBLIOGRAPHIES FOR TEACHERS

FOR a number of years the faculty of the Southern Oregon College of Education at Ashland, Oregon, have compiled annually a bibliography of professional books and magazines for elementary-school teachers. The most recent of these bibliographies appears under the title "Elementary Teachers' Professional Library" and contains a well-selected list of books on various topics of interest to elementary-school teachers.

Another helpful bibliography, prepared by the National Recreation Association, is entitled "Bibliography on School Assemblies." It may be obtained from the offices of the association, 315 Fourth Avenue, New York City. The price is ten cents.

THIRD ANNUAL CONFERENCE ON READING

THE third annual conference on reading for teachers and school officers in elementary schools, high schools, and junior colleges will be held in Mandel Hall, University of Chicago, June 26-29, inclusive. The central theme of the conference is "Reading and Human Development." The programs for successive half-days of the conference will deal with different aspects of the problem: promoting growth through reading; growth in the interpretation of meaning; development of ability to read effectively for different purposes and to attain different objectives; development of ability to understand what is read in specific curriculums; growth in interests, appreciations, tastes, and emotional maturity; development of basic reading attitudes, habits, and skills; evaluating growth in and through reading; what the library can do to promote growth in and through reading.

Each half-day program will be introduced with a general session and continued in sectional conferences for teachers of the primary grades, the middle grades, and the high school and college. Evening

round tables will relate to problems of interpretation, including the relation of semantics to reading, oral interpretation and choral reading, and the problems of poor readers. The complete program for the conference will appear in the June number of the *Elementary School Journal*.

The conference is open without fee to students registered during the summer quarter. For those not registered a fee of \$5.00 will be charged for the conference period or \$1.50 a day. To obtain additional information or copies of the program, address William S. Gray, Department of Education, University of Chicago.

CONFERENCE OF ADMINISTRATIVE OFFICERS OF PUBLIC AND PRIVATE SCHOOLS

THE ninth annual conference of administrative officers of public and private schools will be held by the Department of Education of the University of Chicago at Judson Court, College Residence Halls for Men, during the week of July 15-19, 1940. The program in the forenoon will consist of lectures by members of the Department of Education and visiting instructors. Separate round-table discussions for superintendents, high-school principals, and elementary-school principals will be held in the afternoon. Programs of the conference will be mailed to persons applying to Professor William C. Reavis, Department of Education, University of Chicago.

Room and board will be provided, to the extent of the available capacity, in Judson Court for the week, Monday to Friday, for sixteen dollars. Reservations may be made through William J. Mather, Bursar of the University of Chicago.

The conference is open without fee to students registered in the summer quarter and to administrative officers of public and private schools who desire to attend. The general theme of the conference, for which the complete program is given below, is "Evaluating the Work of the School."

Monday, July 15

THE NATURE AND PURPOSES OF SYSTEMATIC EVALUATIONS

"The Place of Evaluation in Modern Education," Ralph W. Tyler, Professor and Chairman of the Department of Education; Chief Examiner, Board of Examinations, University of Chicago

"Recent Developments in Evaluative Procedures," J. Wayne Wrightstone, Assistant Director, Division of Tests and Measurements, Bureau of Reference, Research, and Statistics, Board of Education of the City of New York

"Outcomes of Systematic Evaluation," John H. Herrick, Director of Research, Shaker Heights City School District, Cleveland, Ohio

Tuesday, July 16

THE EVALUATION OF INSTRUCTIONAL SERVICES

"Characteristics of Effective Instruction," Guy T. Buswell, Professor of Educational Psychology, University of Chicago

"Organization of Instructional Materials for Teaching Purposes," Marion Jordan, Supervisor, Cicero Public Schools, Cicero, Illinois

"Measuring the General Effectiveness of Teachers," DeWitt S. Morgan, Superintendent of Schools, Indianapolis, Indiana

Wednesday, July 17

THE EVALUATION OF ADMINISTRATIVE AND SUPERVISORY SERVICES

"Cost Analysis as a Means of Evaluating the Administrative Program," Nelson B. Henry, Associate Professor of Education, University of Chicago

"Criteria for Evaluating the Effectiveness of Supervision," John B. White-law, Head of the Department of Education, State Normal School, Brockport, New York; Visiting Professor of Education, University of Chicago (Summer, 1940)

"The Self-survey as a Method of Evaluating Administrative and Supervisory Services," William C. Reavis, Professor of Education, University of Chicago

Thursday, July 18

THE EVALUATION OF THE SOCIALIZING FUNCTIONS OF THE MODERN SCHOOL

"The School as an Agency of Social Control and Direction," Newton Edwards, Professor of Education, University of Chicago

"The Socializing Values of Extra-curriculum Activities," Paul E. Elicker, Executive Secretary, National Association of Secondary-School Principals of the National Education Association

"Possible Contributions of the Social Status to Training for Effective Community Life," Henry J. Otto, Educational Consultant, W. K. Kellogg Foundation, Battle Creek, Michigan

Friday, July 19

FORMULATING A COMPREHENSIVE PROGRAM OF EVALUATION FOR A SCHOOL YEAR

"For the General Improvement of Instructional Services," Philip H. Falk, Superintendent of Schools, Madison, Wisconsin

"For the Improvement of Non-instructional Services," Ward G. Reeder, Professor of Education, Ohio State University

"For the Improvement of School and Community Relations," Arthur B. Moehlman, Professor of School Administration and Supervision, University of Michigan

WHO'S WHO FOR MAY

The authors of articles in the current issue HERBERT S. ZIM, head of the Science Department of the Ethical Culture Schools, New York City. SAMUEL TENENBAUM, teacher of economics at Girls' High School, Brooklyn, New York. CARL W. ARETZ, district superintendent of schools at Philadelphia. NELLIE L. GRIFFITHS, professor of education at North Texas State Teachers College, Denton, Texas. GERTRUDE HILDRETH, psychologist of the Lincoln School of Teachers College, Columbia University. CHRISTINE P. INGRAM, assistant director of the Department of Child Study and Special Education of the public schools at Rochester, New York.

The writers of reviews in the current issue I. L. KANDEL, professor of education at Teachers College, Columbia University. E. W. DOLCH, assistant professor of education at the University of Illinois. NELSON B. HENRY, associate professor of education at the University of Chicago. FREDERICK S. BREED, associate professor of education at the University of Chicago. EARL E. KLEINSCHMIDT, M.D., director of the Department of Preventive Medicine, Public Health, and Bacteriology at the Loyola University School of Medicine, Chicago, Illinois. ALLEN R. MOORE, director of natural sciences at Morton High School and Junior College, Cicero, Illinois.

DEVELOPMENT OF A PROGRAM OF ELEMENTARY SCIENCE

HERBERT S. ZIM
Ethical Culture Schools, New York City

*

THE PLACE OF ELEMENTARY SCIENCE IN THE SCHOOL

THE program of elementary science is still so new that, despite the work of Craig¹ and others, experimental techniques and curriculums must still be developed to meet the specific requirements of elementary schools. This article gives a report of one effort to develop such a program in the Ethical Culture Schools in New York City during the past ten years.

The Ethical Culture Schools have had a program of elementary science since 1895. The early course, labeled "nature-study," was introduced in the nineties as part of an experimental program. This program of nature-study aimed to bring to the child experiences which would promote social, emotional, and intellectual growth. Strong emphasis was placed on animal life and pets. Learning was made functional through excursions, collecting trips, and farm experiences.

The school population was changing rapidly while this nature-study program evolved. Increased urbanization had its effects on young children, and the growing complexity of their environment brought new interests to the school. Changes within the school curriculum, including increased emphasis on the "here and now" in the social studies, stimulated interest in invention and scientific achievement. Psychologists pointed out children's need for a wider range of manipulative experience in school to compensate for lack of such opportunities in the home. Furthermore, youngsters acquired scientific toys, sets, and games, and brought to school problems and questions arising from these games.

¹ Gerald S. Craig, *Certain Techniques Used in Developing a Course of Study in Science for the Horace Mann Elementary School*. Teachers College Contributions to Education, No. 276. New York: Teachers College, Columbia University, 1927.

These rapidly accelerated changes led to the introduction in 1929 of an experimental program of elementary science. The program was designed to meet the situations created by children's widespread and, often, sophisticated interests. In 1930 a room was converted into a laboratory. Two years later an elementary-science laboratory of special design was included in a new building. After undergoing further testing, the program was extended to both elementary divisions of the Ethical Culture Schools, and refinements are still taking place.

DEVELOPING THE PROGRAM OF SCIENCE

No single technique for developing a program in elementary science met the needs of the Ethical Culture Schools. Intellectual aims in science-teaching were overemphasized in nearly all available programs—a serious fault in a program for young children. Lack of sound opinion on grade placement was apparent. Another reason for tentative procedure was the notable lack of activities in science programs. The function of laboratory work for young children had not been studied. Suggested programs were based on demonstration and observation or on such simple experiments that the conclusions were obvious even to inexperienced children.

The program of elementary science lacked the aid which psychological studies had given to the tool subjects. Nor did science teachers consider children's characteristics. Some programs were unacceptable because of a lack of attention to accepted findings of child psychology. Available programs did not clearly indicate a relation to a philosophy of education. The fact that the Ethical Culture Schools have developed their curriculums around a specific philosophy¹ precluded the use of a plan of elementary science without consideration of its implications for a total plan of education.

The plan of procedure was, therefore, based on slow reconstruction of the science curriculum. The science specialist turned to the situations in the school which offered science possibilities. Experimental programs were introduced; content and methods were tested and modified; current practice was studied; and aid was sought from

¹ Felix Adler, *The Distinctive Aims of the Ethical Culture Schools*. New York: Society for Ethical Culture of New York, 1938. Contains four addresses delivered in 1902.

psychologists and others interested in the total development of the child. Innovations were made as the situations warranted and were retained subject to evaluation and approval by the faculty. Great flexibility characterized this plan of action. Now, after ten years, the science program has reached a point of dynamic equilibrium. Variations which now exist are an inherent part of the program. They include differences due to the varying sizes of classes and location and size of schools.

Since the basic methods of science may apply in totally extraneous situations, the actual subject studied in science may be of less consequence than the ways of procedure. However, educational criteria demand that the science studied be meaningful and significant to the pupils. These two considerations have been borne in mind in selecting the specific content of the science curriculum.

Content has been chosen for study at the class teacher's request. One teacher reported, "My class does not eat well in the lunchroom. I think a study of food would help. Will you consider this in science?" Or another, "The second grade has built an airplane in their room. Could you help them put lights on the wings and the tail?" The specialist, in aiding the groups, took constant care that the activity brought forth basic scientific values in addition to manipulative or factual learning.

Frequently the science work has been related to the social studies—sometimes as a handmaid. Far more often, however, the science specialist and the class teacher find areas of study with implications for both science and social studies. Food, clothing, and shelter are such obvious areas. However, these are not all. One sixth-grade class developed an excellent unit on "Scientific Aids to Navigation" in connection with the study of exploration. A third-grade group collected and refined minerals (copper, iron ore, and clay) from local mines as they studied about "workers" in social studies. These projects, where both the class teacher and the specialist draw from a single source, are often the most successful because the children have a reinforced contact with the subject and have frequent occasion to apply their science in situations outside the laboratory.

The content of the science curriculum is also augmented in relation to other "special" subjects, such as music, art, industrial art,

home arts, or shop. A group of fifth-grade pupils, with the art teacher, worked in the laboratory to make their own paints from earth colors and chemical precipitates. The specialist found this work rich in science experiences. Paints were analyzed and tested. Later, with the paints that they had made in their science work, the pupils painted a mural of an alchemist's laboratory.

Science content is sometimes selected (in proper grades) by voting. This method is satisfactory when the group understands the responsibility of the choice and is able to carry through the task that is chosen. With younger children or with less responsible groups, preferences expressed by the children may be modified by the specialist to meet the maturity of the group. A preference to study "medicine" might be modified into some branch of physiology, or a desire to study radio and television channeled into some related but simpler subject. Certain short studies have been occasioned by current events, such as the burning of the zeppelin "Hindenburg" or the radio scare of a Martian invasion. One experimental program was based on the hobby activities of boys and girls outside school. Science content has also been centered in "school service" or in tasks which classes or clubs have undertaken for the benefit of the school. These included the study which led to the installation of a buzzer system to summon the fourth-grade messenger service and the designing of illuminated signs for the school store.

In brief, the science work has taken its content from a wide variety of sources and has chosen this content for many reasons. The science work may be considered as based on problems, situations, or questions. It is related to the interests and the preferences of pupils.¹ Science has come from problem situations in school, although the problems were not always expressed directly by children but at times required the interpretation of the specialist.

GRADE PLACEMENT OF SCIENCE CONTENT

In relating elementary science to the problems arising from the classroom, the specialist is often confronted with difficult science

¹ An expression of the philosophy of science-teaching to which we subscribe is found in *Science in General Education*. Report of the Committee on the Function of Science in General Education. Commission on Secondary School Curriculum of the Progressive Education Association New York: D Appleton-Century Co., Inc., 1938.

questions. The following questions are illustrative of those asked below Grade III in situations where more than a cursory answer was desirable: "Where does helium come from?" "What were the first living things like?" "What makes a motor work?" Some science teachers expressed the opinion that questions such as these could not be answered below the seventh-grade level and that in lower grades the attention of children should be directed toward simpler things. Since this advice seemed contrary to the philosophy of our science program, a small experiment was set up to test the extent to which young children could assimilate and use detailed information obtained in response to questions.

"What makes a motor work?" a second-grade question, was selected for the experiment. Around this question was devised a unit of work involving many experiments, which are usually performed in junior high school science, and requiring advanced concepts and vocabulary. The specialist and the class teacher worked together until, through experience, the group achieved a logical explanation of the gasoline motor. At the same time the teacher and the specialist wanted to know the extent to which the information and the experiences were accepted and used by the children. A careful record was made of every discussion and laboratory experiment so that the class teacher would be aware of sources of science information. During the day all incidents and children's remarks involving science experience were recorded by the class teacher. This record included the voluntary references to motors or to specific concepts about them made by the children while playing with their airplanes, etc. In addition, the co-operation of parents was secured in recording incidents and anecdotes from the home.

At each science period the children drew pictures of the experiment or some part of it. These pictures (drawn in five to ten minutes) were stored for two weeks and then returned to the pupils. Each pupil was asked to tell the class what his drawing illustrated. A record of these picture interpretations was kept. A simple true-false test was developed with each set of science experiences. A story about the experiments was told, and the children wrote "yes" or "no" about parts which were or were not true. They were asked to draw a line if they were uncertain. Since this group had just

mastered simple writing, they enjoyed the experience and soon learned the technique of the test. Seven such tests showed a good grasp of the facts.

This small group studied motors in ten laboratory periods and discussions. The experiment was not publicly reported because of the size of the group and the inadequacy of the home reports. Both the tests and the picture interpretation proved to be promising techniques. Anecdotes were highly significant, but too few parents responded. The following anecdote, relating to the early experiments on burning, illustrates the children's application of this learning experience.

During dinner Alan suddenly asked, "Mother, do you know the name of the metal that burns?" [Magnesium]

MOTHER. "Never heard of it. Where did you hear of it?"

ALAN: "Our teacher burned some for us in science. It burns with a very bright light."

MOTHER: "Does that prove anything?"

ALAN: "Yes. It proves that fire can give light and heat too. If we should fill our fireplace full of this metal and burn it, it would make us warm, and we wouldn't need to turn on any light because the room would be all light enough to read by."

Anecdotes such as this and the other data suggested that even young children could assimilate and use a wide variety of science information. To answer the question of grade placement, the class teachers and the specialist have agreed that attempts should be made to develop answers to group questions at any grade level under the following conditions: (1) when questions come from an important group activity and are an integral part in the development of the activity; (2) when information can be brought out by means of simple, concrete experiences in the class and the laboratory; (3) when there will be related situations in and out of school in which these experiences may serve to guide the child's activity.

These criteria have guided the specialist to a wide range of experiences for elementary children. Some questions which primary classes have successfully explored in science include:

Kindergarten

How do the doors of the Pennsylvania Station open? [An electric-eye device.]

Grade I

How can we build a pneumatic tube like the post office?

Can we put up electric lights and a bell in our playhouse?

Grade II

How does a captain know how to steer his ship?

Why must we drink milk at lunch?

How are babies born?

In the upper grades the problems cover an even wider range and are increasingly difficult.

METHODS OF SCIENCE-TEACHING

Whatever the source of content, class work in nearly all grades has proceeded through planning with the children. The extent of this planning has varied with the age and the nature of the group and the type of problem studied. As one phase of planning, the science specialist has made definite effort to rephrase questions and problems into experimental situations and in other ways to elicit suggestions for activities. The aim has been to have the group engage in individual laboratory work whenever possible.

Stress is placed on individual laboratory work because of specific values expected from it. First, it permits each pupil to engage in the manipulative activity important for muscular control and co-ordination. Second, it provides the most personal application of learning by doing. Third, it enables the teacher to give individual help to those pupils who need it most and to permit others to work at their own rate of speed. Fourth, it provides strong psychological motivation for continued interest: personal success with ego satisfaction, competition with materials in a problem situation, discovery and invention. The individual work permits a wide range of sensory perception and enables the child to see, hear, feel, and sometimes smell and taste the things with which he is working.

This emphasis does not mean that each child works alone at a given task. Here, too, variability has been developed in the program. On some occasions all pupils perform the same experiment. At other times the group works in pairs or in "committees." Frequently the members of the entire class do not perform the same experiment. Variation is constantly introduced as a basis for comparisons and for better understanding.

The development of individual laboratory techniques in the elementary grades has been a major task. The delicate adjustment between freedom and safety in the laboratory has had to be carefully watched. Faith in the children is important, and this faith is well founded, since the safety record has been most satisfactory.

The program emphasizes individual laboratory work based on problem situations. This emphasis has necessitated the introduction of scientific techniques at levels which have differed greatly from the traditional levels. Elementary science need not limit its scope because the use of microscopes, Bunsen burners, chemicals, or balances has heretofore been confined to the secondary school or college laboratory. Eight-year-old children can use Bunsen burners and can work successfully in experiments requiring heat. Six-year-old pupils can connect batteries to lights and bells. Eight-year-old children can set up telegraphs, and pupils two years older can connect telephones and experiment with crystal radio sets. Chemicals differ widely in their nature. Enough safe kinds exist to permit chemical experimentation in elementary science. Seven-year-old pupils can do simple chemical experiments, while eight-year-olds can test for nutrients and do similar work. Fifth-grade pupils (ten years of age) can prepare oxygen, chlorine, hydrogen, or make invisible inks. Small microscopes, magnifying seventy-five diameters, are constantly used in Grades IV, V, and VI. Instruments for weighing and measuring are used by all children over seven. Arithmetic takes on increased meaning when it becomes important for weighing rats or measuring the amount of water needed to make a chemical garden.

In the laboratory we have made excellent use of model steam engines, electric trains, motors, and airplanes. We have also used a great variety of animal life. There are at least six or eight kinds of animals constantly available for study or experiment, and during the spring there are often many more. Growing plants are always kept on hand. Primary children often plant seeds and bulbs as part of their science experiences.

While individual laboratory work is the basic method of teaching, we have not dispensed with demonstrations. There are times when a demonstration lesson is preferable to individual laboratory work. This demonstration may be conducted by the specialist with the assistance of pupils. A good way to introduce new pupils, lacking

confidence in the handling of laboratory materials, is to use them as assistants in such demonstrations. A pupil may also give a demonstration in the classroom to which another class is invited, or at an assembly, or may prepare an exhibit in the halls. Such demonstrations entail preparation of charts, maps, pictures, raw materials, collections, or experiments. Here the speech and art teachers help the class in developing a good presentation.

Through laboratory work and group studies in elementary science, the attempt is made to develop in pupils certain basic ways of thinking and acting. In addition, the study of science performs other concomitant functions, which have educational value. The function of service to the school is one of these. An outstanding characteristic of science is its contribution to human welfare. Yet children have little opportunity to become aware of the services that science performs. Learning that electricity furnishes light and power is not enough because no problem for the child is involved. The service must come from a situation in which the children are involved. It must produce results which they recognize. Fortunately there is ample opportunity for such service in the elementary school. One fourth-grade group studying sound was able to diagnose the causes of excess noise in the dining-room. They secured the co-operation of the school, through an assembly and exhibits, and influenced the administration in having the room acoustically treated. With a foot-candle meter another group made a survey of light in the classrooms. They found two situations where the lighting was insufficient, and these were corrected.

Service has not been limited to this particular type of "trouble shooting." A flower club of fourth-grade girls assists teachers in caring for plants in the school. They start bulbs for classroom use, apply chemical fertilizers, wash and repot plants. A pet club stimulated interest in pets, which were sold at cost to the children. With each sale detailed instructions for care of the pet were given, and sales carried a replacement guaranty. Representatives of the club spoke to classes and ran a library of books about animals and pets. A group of sixth-grade pupils with an interest in photography took over the responsibility for school pictures. They photographed festivals, plays, and classroom activities. Prints, sold at cost, paid for their materials.

Other aspects of service are possible. A group interested in radio might arrange to set up receivers in the classroom for educational programs. Others might take charge of moving-picture and projecting machines. Through science activities a group might undertake an investigation of traffic in the halls, sanitation in the wash-rooms, or other problems where pupil co-operation is necessary. When these service activities are genuine tasks which children recognize and accept, the science work takes on values that it cannot ordinarily achieve in the classroom.

SEX EDUCATION

The program of science does not set sex education apart as a separate area of instruction. Children often ask questions about growth, reproduction, nutrition, death, and other physiological activities. These questions may warrant study by the class or perhaps only a discussion with a few individuals. No attempt is made to segregate questions about sex from any other questions which science can help answer. Typical children's questions in this sphere include: (1) "How is a baby born?" (2) "What makes twins?" (3) "What is the difference between boys and girls?" (4) "How can you tell when a rat is going to have a baby?" (5) "Why are children like [or unlike] their parents?" (6) "What happens when a person dies?"

In the elementary school, activities with animals may form an adequate basis for factual answers to questions. Many litters of rats are born in the schools every year. Children have also seen rabbits, guinea pigs, fish, and frogs reproduce. They have seen animals die of various causes. In some situations a pregnant rat is sent to be cared for in the classroom. The class teacher answers questions and directs the observation of the pupils. In the primary grades it seems preferable that the class teacher take this responsibility. With other groups the specialist may be called in to discuss the questions with the class or have conferences with smaller groups. In the laboratory, books on physiology are available to all pupils. We have found most anatomical charts so detailed as to confuse pupils. Simple homemade diagrams of body organs and processes are quite satisfactory.

In the upper elementary grades we are prepared for more ad-

vanced questions on heredity, disease, growth, and reproduction. Discussion must be frank and serious. All questions presented by the children should be answered by the teacher or by the school physician. At this level we open incubated eggs and may occasionally make use of the dissection of a frog or rat, but we proceed cautiously, as we realize that this procedure may be disturbing to an emotionally immature child. Interest in growth and development is strong in Grade V and stronger in Grade VI. For this reason nearly every group engages in a study of some phase of physiology for periods during these years.

The science department has never assumed that supplying information about reproduction was solving sex problems of boys and girls. We realize that information may play only a small role in securing adequate adjustment. Interest in sex may find expression in art work and in writing, as well as science. We have observed how work in art, for example, may supplement information acquired in science. Of basic importance is the co-operation of the entire faculty in giving the child security and assistance in facing *all* problems in the school situation.

SCIENCE FOR THE INTERESTED CHILD

Early in the development of the science program it became clear that group work was not sufficient. Despite flexibility and individual attention, this program did not satisfy boys and girls who were actively interested in science. We have since discovered¹ that many boys and girls who are actively interested in science during their adolescence became interested between the ages of ten and twelve. This fact implies that attention should be given to fifth- and sixth-grade children who profess an interest in science. At first (in 1931) a free period was provided once a week when interested pupils met to work on topics of their choosing. At present there are richer possibilities for the interested pupil, who may use the laboratory several times weekly.

This individual science work is of special value to the boy or girl who has read widely in science or who has had advanced experiences because of home activities with scientific sets and toys. These children are extremely interested. They often work out difficult experi-

¹ Herbert S. Zim, *Science Interests and Activities of Adolescents* (forthcoming publication).

ments and show unusual creativeness in their own "inventions." In addition, there are therapeutic values in elementary science, which are being explored and used in the Ethical Culture Schools. With the guidance of psychologists these seem to have definite value.

Sometimes a group of pupils with similar interests form a club and aid one another's progress. The photography club built a dark-room—a task too ambitious for an individual. An airplane group was able to visit flying fields and factories where individuals could not have gained entry. In one of the schools the club activities were formalized into a "guild" pattern, and the children drew up rules of guild conduct and workmanship. In most cases the club or group organization offers distinct advantages for sixth-grade and often for fifth-grade pupils. In Grades III and IV, and sometimes in Grade V, the pupils seem to work better in the "optional" periods, where each child tackles his own problem.

EVALUATION OF PUPIL PROGRESS

The program has developed slowly and has indicated the values to be derived from group and individual activities. The latter may be considered more fundamental since the value of science must ultimately be determined by the changes it produces in the behavior of the individual. To assay these changes has involved the use of new techniques. At first this evaluation in elementary science was a subjective process. The specialist wrote a short "character" report about each pupil. This method was unsatisfactory because the report did not focus attention on specific progress but often led to vague general statements. In connection with the study of content, the use of anecdotal records was started. This method had definite possibilities in evaluation and is still being used. Clear instances illustrating particular behavior are felt to be more pertinent than general statements.

Occasionally in Grade VI we tried standard tests, such as Powers' General Science Test and Noll's "What Do You Think?" There has been some use of true-false tests in Grades II and III. Essay-type questions have been employed in Grades V and VI, but they have been restricted to specific situations. The picture interpretation, mentioned above as having been used in Grade II, has also been employed in Grade I. This method offers an additional means of

evaluation at the primary level. Recently an experimental test based on free association has been tried in Grades V and VI. The results have been gratifying and suggest the possibility of using this technique in evaluating progress.

Another recent attempt at evaluation has been the use of controlled interviews with all pupils in Grades IV, V, and VI. Pupils in these grades were asked to fill out a short questionnaire dealing with activities, preferences, pets, vocational choices, etc. These questionnaires were used as a basis for an interview, in which pupils spoke frankly and seriously. Immediately after each interview a record was made on mimeographed sheets, which included a section for an abridged description of pupil behavior. This description was made in terms of five traits selected for their significance in science education: (1) dependability or responsibility, (2) manipulative ability, (3) interest, (4) open-mindedness, and (5) experimental attitude.

All the data pertaining to a pupil's activities in elementary science have been gathered into a cumulative folder, which will eventually contain the pupil's science record from kindergarten through Grade VI. At present, in the second year of the use of the cumulative record, we are working on Grades III through VI. In the folder are placed all written papers of pupils, questionnaires, rating sheets, anecdotal records, carbon copies of school reports, and any other data pertaining to the pupil's growth in science. This folder will be of even greater value in years to come when a cumulative record of four, five, or six years will be available. It is hoped that by then these folders will yield data on the development and the significance of science interests and activities in the elementary school.

FURTHER PROBLEMS

There are many problems which have not as yet been clarified by study or trial, including sex differences in interests and activities and the education of class teachers to an awareness of children's interests and problems. Improved techniques of co-operation with the specialist are needed. The search for better methods of evaluation has already been mentioned. Grade placement is still a problem. Parent relationships are important, particularly for pupils interested in science. The entire role of scientific games and home devices needs attention. These, in brief, are some of our problems.

UNCONTROLLED EXPRESSIONS OF CHILDREN'S ATTITUDES TOWARD SCHOOL

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THE PROBLEM

THE purpose of the investigation was to discover the attitudes toward school expressed by sixth- and seventh-grade children. This group was chosen because they appeared better suited for this type of study than children in higher or lower grades. Younger children, it was thought, might not be sufficiently fluent or literate to express their opinions; the opinions of children in the next higher grade (Grade VIII) might be colored by their approaching graduation; and children in high school are not as representative a sample of the school population, and, furthermore, their views are likely to be colored by social and vocational objectives. Hence the grades finally chosen, it was thought, represented a midstream group of such nature as to give a true reflection of school attitudes, uninfluenced and untainted by extraneous considerations.

PROCEDURE

The investigation was confined to 639 children in three New York City elementary schools located in varying neighborhoods. One school was located in a superior residential section, another in an average to middling section, and a third in a poor neighborhood. Because of the variety of neighborhoods, the sampling can be said to be as representative as could be obtained with the limited means at the disposal of the average investigation, particularly in view of the huge school population in New York City.

The children were asked to answer the following question.

Imagine your best friend asked you, "Do you like school?" What would you answer? Write it down just as you would say it to him. Don't worry about spelling, English, or anything else. Write it down, just as if you were speaking. Say just what you think about school. If you like school, say why. If you don't

like school, say why. If you do not have enough room, use the back of this paper.¹

The answers to this question, since they represent the uncontrolled and spontaneous expression of the children, would provide, it was thought, insight into the children's attitudes which could be obtained in no other way. The children answered the question anonymously, away from the presence of teachers and supervisors, in order that maximum honesty might be assured.

To list all the responses of the children who participated in the study would make interpretation difficult, if not impossible. For this

TABLE 1
DISTRIBUTION OF RESPONSES OF 290 BOYS AND 290 GIRLS TO QUESTION
WHETHER THEY LIKED SCHOOL

RESPONSE	BOYS		GIRLS		BOTH	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Like school . . .	141	48.6	200	69.0	341	58.8
Dislike school . .	69	23.8	30	10.3	99	17.1
Mixed emotions	80	27.6	60	20.7	140	24.1
Total	290	100.0	290	100.0	580	100.0

reason the following procedure, approximating some sort of statistical approach, was used. The responses were divided into three categories: (1) responses which indicated overwhelmingly favorable attitudes, (2) responses which indicated overwhelmingly unfavorable attitudes, and (3) responses which indicated mixed emotions and feelings. The number and percentage of responses falling in each of these categories are shown in Table 1. The pupils in the third group like some things about school and dislike others. Some of these children said that they would like school if certain changes were made. The best way to describe their attitude is to say that sometimes they like school and sometimes they do not. Typical responses made by this group follow. The language, wherever possible, follows the style

¹ This is the last item of the investigator's School Attitude Questionnaire Test. The test is described in the writer's article, "A Test To Measure a Child's Attitude toward School, Teachers, and Classmates," *Educational Administration and Supervision* (forthcoming number).

and the sentence structure of the child's own statement. The exact words could not be given, for the children's responses were often long and involved and contained extraneous material which had nothing to do with this study. However, the gist of the ideas was extracted, and the attitude of the original response was retained.

Sometimes it's all right, but at other times I hate it because my teacher gets cranky.

Sometimes I like it and sometimes I hate it.

It's all right if I have a nice teacher.

I like school sometimes. I hate to get up.

I'd like school if the hours were shorter and if the teachers were good.

Sometimes I like school when I have a lot of fun. Sometimes I feel disgusted and I feel like staying home. But I must like it because I go there.

Such responses are classified in Table 1 under the heading, "Mixed emotions."

STATISTICAL TABULATION OF RESPONSES

A reading of the responses revealed that they fell, for the most part, into set patterns. The same reasons for liking or disliking school appeared time and time again. Some examples follow.

I like school because it gives you an education.

I like school because I learn many things. These things will be of much help when I work.

I don't like school. I'd rather be home helping my mother or go to work.

School is terrible and I wish I didn't have to go because the teacher is strict and makes you write things 100 times.

At times a child reacted to the question with strong sentiment. Such a response, however, was not typical but rare. Two such emotional outbursts follow.

I despise school so much that I'd rather be dead than go to school. I'd do the hardest work there is, than go to school.

I think school is the most important place in the world and I would rather be in school than any other place. As for my teacher, Mrs. ———, I think she's grand. I don't think I would want to be in any other place but school. It does help me a lot. I wouldn't care if I had \$20,000,000, I would still hold to my education.

In instances where the responses followed conventional patterns (and, as previously stated, the great majority of cases did so), the reasons for liking or disliking school were tabulated. From the outset it should be understood that a child did not always give one reason for liking or disliking school. Some children gave one reason; some, two; and some, three or more. Sometimes a child would state a tabulated reason and also a reason which was so individual and isolated that it could not be tabulated. At other times a child's response was so individual that it resembled no other response, and some children did not answer the question at all. Wherever possible, the reasons were tabulated so as to allow for statistical analysis.

GROUPED RESPONSES

An examination of the reasons stated for liking and disliking school discloses that some of the reasons are very similar. For instance, the first three reasons shown in Table 2, which deal with school as an educational institution, although worded somewhat differently, have much in common. They have been separately listed, but provision is made for totaling the frequency of these responses. Reasons 4, 5, 6, and 7 deal with school as a preparation for the workaday world, and these also have been grouped together. The same applies to reasons 8 and 9, which deal with favorable attitudes toward the teacher; to numbers 10 and 11, which deal with school as a place of interest and amusement, and to reasons 21, 22, 23, and 24, which deal with unfavorable attitudes toward the teacher.

ANALYSIS OF DATA

Children take serious attitude toward school.—Examination of Table 2 reveals that children regard school in a serious and an earnest light. School stands for education, and children believe that this education will help them get ahead in the world—vocationally, socially, and otherwise.

Despite the statements of the modernists and the followers of Dewey, the great majority of children do not appear to evaluate school in terms of immediate interests. "Fun" and "enjoyable" in connection with school were mentioned fourteen times by the boys and twenty-eight times by the girls. However, "getting an educa-

TABLE 2
REASONS OFFERED FOR LIKING OR DISLIKING SCHOOL

RESPONSE	FREQUENCY OF MENTION		
	Boys	Girls	Both
Responses indicating liking:			
1. I get an education	19	28	47
2. I learn things	33	59	92
3. It makes me smart	9	13	22
Subtotal	61	100	161
4. Helps me get a job	12	19	31
5. Will help you out in the world	11	19	30
6. School will help you when you are older	2	5	7
7. Help me make a lot of money	1	..	1
Subtotal	26	43	69
8. I like the teachers	17	40	57
9. Teachers are good	1	9	10
Subtotal	18	49	67
10. You have fun	10	19	29
11. School is interesting and enjoyable	4	9	13
Subtotal	14	28	42
12. I like the fellows at school	1	11	12
13. I like school	39	43	82
14. It's all right	18	13	31
Total	177	287	464
Responses indicating dislike:*			
21. Teachers are too strict	3	..	3
22. Teachers are insulting	3	1	4
23. Teachers are unfriendly	3	1	4
24. Teachers are bad	7	3	10
Subtotal	16	5	21
25. I don't like school	29	8	37
26. The work is too hard	6	4	10
27. The classmates are disagreeable	1	1	2
28. The monitors are unfair	1	1	2
29. The hours are too long	10	4	14

* It is to be noted that the last item under the classification indicating liking for school ends with 14. The classification for dislike begins with 21. The reason for using another decade was that it was thought this scheme would differentiate the two groups more sharply and distinctly.

TABLE 2—*Continued*

RESPONSE	FREQUENCY OF MENTION		
	Boys	Girls	Both
Responses indicating dislike (<i>continued</i>):			
30 I don't like to get up in the morning,	1	3	4
31 I don't like the subject matter	3	3	6
32 I'd rather work,	5	3	8
33 I'm too old for the class	1	4	5
34 We get too much home work	5	...	5
Total,	78	36	114

tion" and "learning things" were mentioned sixty-one times by the boys and a hundred times by the girls. The fact that education will prove helpful in making money and getting on in the world was mentioned twenty-six times by the boys and forty-three times by the girls.

The study reveals the seriousness of children excepting in infrequent instances. They do not look at school as a place of joy or pleasure. There is no exuberant enthusiasm displayed. There is no zestful approach to the school situation. The children attend school with consciousness that it will help them out in later life. School is not pleasurable for itself. It is important for its future promise.

Children think in adult terms.—The data also indicate how quickly children learn to think in adult terms. If it were stated that parents had given the reasons for favoring education that are shown in the table, there would be no surprise, no pause to say, "How childish or infantile!" The reasons that the children offered were mostly of an adult type and displayed adult thinking and feeling. As one child naively put it: "I like it [school] a little bit. If I didn't go to school, I would be a garbageman. I want to be a boss and be paid well without doing much work." The child may have been blunt in the way he expressed his thoughts, but the statement probably revealed, with honesty and sincerity, his attitude toward education. Another child wrote: "I like school sometimes when teacher doesn't holler. However, I must get an education because I want to be a C.P.A."

The adult character of the responses suggests that the school is an

instrument of the community, playing its assigned role in the community, and that the children attending this institution assign to it the same reasons for existence that the community does. Hence one can infer that the school is a means, not an end in itself, and that it performs a function assigned to it by the community. Instead of creating attitudes, the school is the recipient of attitudes.

Girls are more favorable toward school than are boys.—The free expression of opinion shows that girls are more favorable in their attitude toward school than boys. Table 1 shows that 141 boys and 200 girls expressed favorable attitudes toward school, and that 69 boys and only 30 girls expressed "dislike."

The girls showed a greater liking for their teachers than did the boys. The teacher was mentioned by the entire group sixty-seven times in connection with favorable school attitudes. Of this number, the girls mentioned the teacher forty-nine times, the boys only eighteen times. Girls appear more serious in their approach to school. The girls mentioned education and learning in connection with school one hundred times, the boys only sixty-one times. Even when it comes to practical considerations, the help that education will give in obtaining a job and getting on in the world, the girls stand out ahead of the boys. The girls appear to have more fun in school, as evidenced by the fact that twenty-eight girls mentioned this reason for liking school, while only fourteen boys did so. Eleven girls and only one boy mentioned classmates as adding to the pleasure of school.

These findings are in conformity with the data resulting from responses to the entire School Attitude Questionnaire Test. The girls responded in a fashion to indicate more favorable attitudes toward the school situation than did the boys. The findings again suggest the possibility that the school is better adapted for girls than for boys or that girls are more conventional and conservative and less given to rebellion than boys.

The teacher is important in creation of attitudes.—An important factor, but less important than the foregoing factors, is the teacher as a determiner of children's attitudes toward school. The children who disliked school mentioned the teacher as the cause of dislike more frequently than they mentioned any other factor. This result

agrees with the findings of Terman,¹ whose group also mentioned the teacher most frequently as the reason for disliking school. Any number of responses can be cited to show how important a role the teacher plays in the creation of attitudes. Several responses follow.

I like the teacher I have now. I like school when the teacher is not strict.

I don't like school because the present teacher is mean.

I like the teacher I have now, but teachers are strict.

When teachers are nice, I like school. When teachers are bad, I hate it and it seems forever until I get out.

The only trouble is that some teachers do not understand us children. There are many mistook words which end up in tears. The teachers do not realize that they were once children themselves. Therefore, they have become hard and stern. And while there are children who deserve scolding and get it, while the good ones have to suffer if they do something once.

Other factors in the school situation which create favorable or unfavorable attitudes are impersonal and difficult to change. The teacher is the most flexible and the most easily changed element in the school situation. This study suggests that the teacher plays a vital and crucial role in creating favorable and unfavorable attitudes and that the relation between the teacher and the child appears at times to be anything but cordial.

Other causes for dislike of school.—The next most frequent source of complaint is that the hours are too long. For children who admit hating school, this response is understandable. Occasionally a pathetic note was struck in the answers. The most moving type of complaint came from the over-age children. When the data are listed in a statistical tabulation, the unhappiness of these children does not show up in its true poignancy. For instance, one child wrote: "I don't like school because the children in my class are much smaller than I am. I want to go to school to graduate but I feel gorky next to the other boys and girls." Another child wrote: "I don't like school because I'm old and in a low grade and I feel funny to sit with young children." Retarding a child presents, it would appear, not only an educational problem but one that also involves attitudes.

¹ Lewis M. Terman, *Mental and Physical Traits of a Thousand Gifted Children*, p. 269. Genetic Studies of Genius, Vol. I. Stanford University, California. Stanford University Press, 1925.

Children are not critical of school.—The children's faith in the school and all that it represents is sometimes ludicrous. The child assumes that the school educates him, even if the evidence indicates that he has not gained any benefit from the kind of instruction which is generally expected of the school. A seventh-grade child wrote: "Yes, I like it Because you learn a good education and when you get out you could get a job." Another seventh-grade pupil wrote: "I like school because you lern a lot and at P.T. you get a lot excercise." These two responses are given verbatim.

CONCLUSION

The school, this study suggests, is an institution—a product of the community—serving the needs of the community. The children making use of its facilities regard the school in the same way as do the adults in the community. This study suggests the possibility that the community and not the school creates attitudes concerning the school.

ADMINISTRATION OF A PROGRAM OF CONTINUOUS PUPIL PROGRESS

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PERHAPS the most important factor in developing a program of continuous pupil progress is the freedom of the teacher to plan his own program within certain well-defined but rather broad limits. The administrators of most large city school systems in America have been guilty of preaching an activity philosophy—a philosophy built on learning through experience—and then imposing administrative and supervisory arrangements that reduce this philosophy to little more than so many pages in a book on modern education. They exhort their teachers to recognize individual differences and to democratize procedures. At the same time they require the teachers to instruct large classes, to group their pupils into grades, to present elaborately detailed content specified for those grades, to test progress in the light of standards of achievement for graded courses of study, to compartmentalize the program on a subject basis with so many minutes allotted to each subject, and to promote once or twice a year the pupils who have made the hurdles of a grade. Under conditions of this sort, though it may not be impossible for a teacher to develop a program of continuous pupil progress, certainly it is difficult. The writer's contention is that, within certain broad limitations defined by social demands, teachers must be free to develop co-operatively a program which will provide for the uninterrupted growth of their pupils. This point of view represents democratic school administration. Furthermore, it assumes a school personnel prepared to accept the responsibilities that are implied.

During the past few years there has been a marked tendency in Philadelphia public schools toward wider latitude in interpretation, especially in the adaptation of courses of study to local conditions. Schools are also encouraged to make such modifications as are neces-

sary in the development of a program of continuous pupil progress. This new attitude on the part of the department of superintendence offers great opportunities for initiative in school organization, curriculum construction, and teaching procedure. This freedom implies the necessity for a correspondingly keen awareness of responsibilities. Freedom to interpret, to adapt, to modify, or to create is justified only insofar as it contributes ultimately to the growth of the children.

It is a thrilling adventure to be a part of an educational movement in which democracy is not merely a process of thinking and talking but a program by which we live and on which we act. In District Six of Philadelphia numerous meetings of teachers, supervisors, and principals have been held for the discussion of methods of adapting and modifying the curriculum to develop a program of continuous pupil progress. Studies have been made of current educational literature. Observations have been made in schools that are pioneering in modern practices. Descriptions of experiments have been presented and carefully analyzed. Professors from local universities have been called on to present their views on the curriculum. Groups of principals and teachers have been working together in a consideration of organization changes that might be made. A unifying purpose has been evolved. Basic principles have been well established, and individual schools have been encouraged to make their own applications. The response to this new challenge speaks well for the professional integrity and progress of our teachers.

Marked differences in the programs of schools have resulted from various community conditions. Promotions, excepting as required in paper reports, have given way to placement and organization as part of our program of continuous pupil progress. Grade, for all practical purposes, has become synonymous with school age. Emphasis has been placed on group work and different ways of classifying pupils. Courses of study and time allotments are viewed as guides. Modifications proposed for the pupils' progress records are receiving consideration. Experiments of different kinds are being tried and carefully observed. Diagnostic and remedial teaching is resulting in the development of all kinds of self-teaching, self-directing, and self-checking arrangements. Individualization of instruction is recog-

nized as the base of a program of continuous pupil progress. Informality in classroom procedure is becoming more prevalent. The entire administrative setup is more flexible.

Arrangements have been made to meet with parents and community groups. Not only do we need to have the parents familiar with our thinking, but we need to have the benefit of their thinking. The way is not really democratic unless the parents to whom the children belong are, somehow or other, made participants in matters of vital concern in the growth of their children. The day has passed when the public school simply tells the parents what it proposes to do with their children. Parents have a right not only to know what is being done but also to contribute their point of view.

Tremendous problems lie ahead in any project with such significant implications. The easiest part of freedom is the actual declaration of liberty. There is always the possibility of the improper use of privileges, the failure to comprehend objectives, or the misinterpretation of procedures. This freedom does not mean that a teacher in a public school may teach whatever and however he pleases. His freedom is wrapped round with responsibilities to the children, to the parents, to his associates, to the community, to all that is known in education about child welfare, to the social and spiritual heritage of America, and to those ideals which ever point the way for individual growth and social progress. Teachers see clearly that no responsibility is greater than that which comes with freedom.

When individuals become aware of the responsibilities that accompany their freedom, they appreciate the necessity for co-operation. As a result the emphasis in administration shifts from co-operative supervision to co-operative teaching, from rating teachers to working together, from teacher growth as a direct approach to teacher growth as incidental to the improvement of learning conditions for the children. This transition has been a conspicuous outcome of our attitude of liberalization. Our attention is no longer directed toward a teacher to be improved but rather toward a problem to be solved. In other words, we are all engaged in a project which is of real consequence for our pupils. Together we are seeking solutions to the many problems that have arisen. Through pooling our resources we have discovered the answers to a few.

Some of the questions that have arisen deal with the matter of 100 per cent promotion. Schools that are developing a program of continuous pupil progress have changed their interpretation of promotion to mean reclassification or placement. Actually they do not think in terms of promotion. It is, therefore, an anachronism to speak of a percentage of promotion. This change may be confusing to parents and teachers who are accustomed to promotion as an indication that the child has acquired certain facts, knowledge, and skills taught in a particular grade. In a program of continuous pupil progress, each child is given opportunities to progress in the various fields of learning in accordance with his ability in each field.

This plan necessitates entirely different methods of grouping children for different activities. A child may excel in one activity and be rather advanced for his chronological age group; on the other hand, he may be retarded in learning a certain subject in comparison with children of his age level. A program of continuous pupil progress requires the adaptation of school organization to conditions of this sort. In other words, at the beginning of a new term each pupil will begin his work in each field of growth at the level that he has achieved. He will not be compelled to repeat those things that he has learned well just because he has not made satisfactory progress in other things. Briefly, the elementary school is regarded as an organization in which for six years opportunities will be provided for the continuous growth of each child. The nature of this program necessitates totally different interpretations of the terms "grade" and "promotion." Even with the old interpretation of promotion, research in this field has demonstrated conclusively that children who have not completed the work of a grade profit just as much, probably more, by being promoted.

There are teachers who ask, "Are we eventually to do away with grades?" That depends on the meaning which is read into the term "grade." If these teachers are using the word in the sense in which it was employed a number of years ago, then in most schools we have already eliminated grades. The old interpretation of grade was that all the pupils in a particular class had presumably mastered facts and skills taught in the preceding grades and were now prepared to study more advanced things specified for the new grade. We all

know that this situation is no longer found universally. We now have children in second-grade classes who are not ready to read, many who are just beginning to read, and some who are reading on higher than second-grade levels. I recently observed a third-grade class in which the range of intelligence quotients was from 85 to 130 and the reading levels varied from primer to fifth reader. For the purpose of correcting the wrong use of the term "grade," there is a tendency to use it as synonymous with school age as the most reliable general index of social maturity.

"What reward is there if we remove promotions?" ask a few teachers who were trained under the promotion regime. Under that system the reward for many a pupil who feared poor marks has been a nervous breakdown. Occasionally one reads of even more tragic consequences attributed to the humiliation of not being promoted. The pressure that some parents and teachers bring on children to secure high marks and promotion is certainly not conducive to mental hygiene. Had Hypatia been a modern teacher, she would have carried in one hand promotions instead of a bucket of water and in the other hand poor marks instead of a pan of burning coals. Both of these she would have cast into oblivion, so that children hereafter could study their lessons for the sake of the intrinsic satisfactions and not for fear of demerits or the hope of advancement to a higher grade.

Then there are teachers who ask, "How can sufficient challenge be presented to pupils in such a program? What will be the effect on the study habits of children as a result of our changed attitude toward marks and promotions?" Pupils cannot be *forced* to learn under any scheme. The idea that children study for marks is the result of generations of emphasis on marks. An "award" is anything extraneous or irrelevant to the act or work performed, which is given for the performance of the act or the work. Marks and promotions have fallen into that category. It is supremely important that children have something at which to aim. The aims established should, however, be pertinent to the work to be done. We should keep the children thinking in terms of things that are bigger and farther along than marks. We want them to be too big to work for mere labels or prizes. We want children to have their pay in a better

and a more enduring medium than those represent. We want to educate them from the level of incentives to the higher plane of motives. For this reason any extensive system of marks is to be wholeheartedly condemned.

Who are we to mark what actually happens to a child in the way of growth when he beholds a beautiful picture, draws in color an autumn leaf, sings an uplifting song, recites a poetic gem, takes his first step in reading, strives to improve his handwriting, studies his spelling words, participates in a discussion, assembles the parts for a miniature electric train, writes a letter to a sick classmate, safely guides children across a busy street, contributes to the alleviation of suffering, reaches his hands for a ball, struggles with the trinomial theorem, comprehends the ablative absolute, translates Vergil's *Aeneid*, analyzes test-tube revelations, travels in imagination through our vast America, dramatizes life in the Orient, considers the circumstances surrounding the war in Europe, plays his many parts in the school community, participates in activities of the student council, pledges allegiance to the flag, or listens to the reading of the twenty-third Psalm? Why desecrate these things with marks, when deep down in our souls we know how inadequate the most elaborate marking schemes are in terms of human values and social growth?

Through myriads of little experiences the child is finding himself in relation to his physical and social environment, and just who are we to label exactly how far he has gone? You may say, "But I can mark his papers." Disillusion yourself by taking any pupil's examination paper in any subject. Give it to ten teachers for marking, and the different marks will tell their own tale. What sins have been committed in the name of pedagogy! We cannot accurately agree on rating a child's tangible accomplishments, much less his effort and his growth. The hundreds of experiences in which a child daily engages defy any attempt to mark what happens inside the child as he reacts to those experiences. A few aspects of growth can be scientifically measured. Standardized tests have a definite place in our program. Diagnostic tests and remedial teaching are indispensable. Individual records of progress are important.

Let us turn our attention more to teaching and less to marking and behold the transformation that will take place not only in the

attitude of children but also in the happiness of teachers. Actuate children with fine motives, set up situations in which they feel their needs, stir their interests, and they will accomplish on high levels that frequently surpass our human comprehension. Teach in a fashion that is real, and the needs that the child feels will make it impossible for anyone to prevent him from studying with an earnestness and zest limited only by his inherent capacity and environmental resources. Our job is to provide real reasons for study. Marks and promotions as rewards or threats constitute no reason at all.

Another rather common question is, "What will happen when pupils are admitted to high school?" If the implication in this question is that pupils will not be prepared for high school, let it be said at once that a real program of continuous pupil progress will result in the mastery of fundamental facts and skills on a scale not to be found in arrangements that obtain in a grading-marking-promoting machine. Here is no attempt to belittle our social heritage.

There always were wide variations in ability among applicants for admission to high school, and there always will be wide differences. That individuals differ is a law of life. The most significant fact in creation is that of individual differences. We would not have it otherwise. What an uninteresting world this would be if every child about to enter a high school knew exactly the same facts in the same way and had developed various skills to the same degree and had an intelligence quotient of 140! Are we trying, through a system of mass production, to mold individuals in the same form, or are we trying to develop individuals? We cannot put children into Procrustean beds in the elementary schools to stretch them for high school any more than the high schools can stretch them for the universities. Let us, then, accept them as individuals and develop them as individuals.

When pupils are about to enter their tenth year of school, we should know what their individual powers and weaknesses are. A wide diversity of opportunities should be provided for these pupils. Proper placement is important. Junior high school guidance and the entire orientation program should provide the answer for each pupil.

If we cannot take care of pupils promoted to high schools, it is not their fault nor the fault of their previous teachers but rather a failure to adapt the offerings to the needs of different children at different levels of growth. Unfortunately too many educators still labor under the misapprehension that high school means Latin, Greek, analytic geometry, ancient history, and those other pursuits generally termed "academic." Too many still view high school solely as a college-preparatory institution. The American concept of culture has changed, and our educational institutions must adapt themselves to this changing concept. Our curriculum should meet the needs of children at different levels of growth no matter what those needs may be. That is the challenge in a program of continuous pupil progress. That is our responsibility in a democratic school system.

We do not know just what form the curriculum will assume, if it takes shape at all. We do know that it should be a living, dynamic, changing series of experiences conducive to growth. We also recognize that the selection and the timing of experiences are of great moment. We attach importance to the purposefulness and direction of experience. We regard experience as an integrating unit in growth. We acknowledge a direct and reciprocal relationship between freedom and growth and an integral relationship between freedom and responsibility. We dedicate ourselves to the inculcation of lofty ideals, the generation of worthy purposes, the instilment of aesthetic attitudes, the building of character, and the promotion of democratic processes. We respect the sanctity of human personality and the eternal value of every living soul. We appreciate the necessity for passing on our social heritage as a means of insuring the perpetuity and continuity of civilized life. We believe with Alexander J. Stoddard that "the progressive school of today considers that habits of critical analysis, powers of evaluation, standards of conduct, and desirable attitudes are just as important as the accumulation of facts, knowledge, and skills."¹

The keynote in our school district project is the encouragement of adaptation to individual school conditions, for which

¹ Alexander J. Stoddard, "Implications of Progressive Education," *Philadelphia Teachers Association News Letter*, XXXVII (November, 1939), 4.

flexibility in administration is designed. A more democratic attitude is observable throughout the schools of the district and in certain schools in particular. The thinking of teachers, principals, and parents has been stirred. It is natural that there be opposition, criticism, and misunderstanding. These responses are all a part of the democratic way of living. When we do not provoke reactions, I seriously question that there is any thinking at all. In any deeply significant movement, opposition is anticipated and hence is not at all disturbing. Under such circumstances we understand the necessity for perennially evaluating our objectives and procedures. The aggressive opposition of minorities keeps us ever mindful of our obligations and responsibilities. Constructive criticism is recognized as a wholesome state of affairs, for critical analyses and helpful suggestions are essential to progress. We have endeavored to reduce misunderstandings to a minimum through observations, discussions, explanations, the exchange of views, and local publications. The only attitudes that cause any anxiety are smug complacency and obdurate indifference. Evidences of these apathetic resistances have been negligible.

A FUNCTIONAL READING LABORATORY IN A STATE TEACHERS' COLLEGE

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FOR five years North Texas State Teachers College has offered to advanced students a course in the psychology and teaching of reading. The course has not been required in any department of the College, but since its inauguration it has been much in demand by students majoring in both the elementary and the secondary fields. The recent pedagogical concern over reading skills and problems has included Texas, and an increasing demand from public-school superintendents in the state for teachers better prepared to teach children to read and to use reading has made itself felt. In an attempt to meet this demand, the College decided to expand its program for preparing teachers to teach reading and in the autumn of 1937 undertook to establish a reading laboratory.

In the establishment of the laboratory, the usual limitations of a state-supported college had to be considered. No special funds were to be had, no grants from foundations; the biennial legislative appropriation had been made, and there was just so much money and no more. There was also the difficulty of finding sufficient room, for unused space was unknown on the campus. From the beginning it was indeed not a question of what should be done but of what could be done. Through the encouragement of a farsighted administration, however, and the unselfish co-operation of several departments, ways and means were found to make the first step toward meeting what was believed to be the purposes of a reading laboratory in a teachers' college.

PURPOSES OF THE READING LABORATORY

These purposes were the guiding principles in choosing and assembling supplies and equipment and in organizing the procedures. The term "laboratory" rather than the term "clinic" was chosen be-

cause it was intended that the situation should be thought of as a place for work in all phases of reading instruction. It was thought that "laboratory" implied a broader, more general use than "clinic" and did not limit the function to diagnosis and correction. From its institution the laboratory had as its purposes.

1. The preparation of teachers for teaching reading in the public schools. The preparation was to include some understanding of the psychology of reading, comprehension of various methods of teaching reading, the recognition of special reading difficulties, some idea of the possibilities of the adjustment of reading instruction, and some knowledge of previous and current studies in the various phases of reading. To this end, the laboratory was to be a place where students could work together on general problems and singly on personal problems. The last purpose includes special problems met in teaching or in writing theses.

2. Service to the children of the Demonstration School and to the children of the public schools in the city and the surrounding area.

3. Service to students of the College who found themselves handicapped by lack of certain reading skills.

EQUIPPING THE LABORATORY

With these points in mind the instructor who was assigned to the task spent much time during the autumn of 1937 planning and organizing the supplies and equipment of the laboratory. In addition to the purposes stated, this basic principle was constantly held in mind: that, since the first objective of the laboratory was the preparation of teachers to teach reading, the materials and the equipment used in the preparation should be limited to such as could be obtained and used by public schools. It does not follow that all the equipment at present in use in the laboratory should be installed in all public schools but rather that none of it is beyond the reach of an average modern school. A part of the materials and supplies were already on the campus and had only to be assembled. Well-known pencil-and-paper tests and small pieces of equipment were included in our first purchase; cupboards were designed and built; and reading textbooks, workbooks, and story-books were brought in. By the end of the semester we discovered that the Reading Laboratory was not

only an activity and a procedure, but a place. Thus the basic cost was not excessive, especially when it is remembered that much of the equipment is permanent. The equipment, moreover, after two years of constant use is in excellent condition and should serve for a number of years more. Consumable materials used in the laboratory are supplied by the College, just as are materials used in other laboratories.

In the small room now used as the Reading Laboratory, we have a large worktable and chairs, a low table for children, blackboard, large-type typewriter, and the specially planned cupboards which contain the few instruments, test materials of many kinds, charts, supplies used for making practice materials, and files for confidential records. A small washroom adjoining the Reading Laboratory has been converted into an amateur darkroom. Unless occupied, the Reading Laboratory is kept locked, not so much from fear of theft as out of respect for the many subjects concerning whom we have on file much professional and confidential information.

FULFILLING THE PURPOSES

Beginning with the second semester of the year 1937-38, a second course in reading was offered through the Reading Laboratory. The work in the course was based on the assumption that the members of the class now had a good understanding of the normal reading processes and of the usual classroom procedures. Continuing from this point, we sought to give the students an insight into various types of reading difficulties, their multiple causes, and some of the procedures used in correcting them. The laboratory was thrown open as a workshop. Each student undertook the problem of helping a child who was experiencing reading difficulties. Each student also assisted in giving group tests and in interpreting the results. During that semester there were many things to learn and many things to do, but the indefatigable curiosity and pioneering spirit of the members of the first class did much to establish the course as successful and desirable. It should also be noted that, during this year of planning and organizing, the unfailing loyalty and intelligent assistance of a Senior student assigned as an N.Y.A. assistant were invaluable.

From this modest beginning the work of the laboratory has ex-

panded until about as many uses are made of it as can be handled with the present resources and space. As for meeting its first purpose, that of service to the teachers, there is now available for advanced students a full year of work in the field of reading. The course in the psychology and teaching of reading is so arranged that students majoring in either elementary or secondary education may apply the work on the requirements for state certification. While the course in techniques of diagnostic and remedial methods does not develop experts, it is believed that the students acquire in the laboratory a broader understanding of reading and a conviction that reading failures cannot be explained by the pedagogue's consolation "low intelligence quotient" nor by the all-covering kimono "lack of interest." The members of the classes have learned something about how to set up and maintain case histories; how to operate certain simple equipment; how to administer, score, and interpret many kinds of tests; and how to locate and assemble this essential information and data in practical situations. Several tests, such as those outlined by Stanger and Donohue,¹ have been set up and tried. The students have learned to think of tests as aids and guides, not as infallible conclusions. They have learned that data and personal information concerning their subjects are to be kept strictly as professional matters and not to be handled casually nor carelessly. Because these courses involve much practical work, requests for help through the classes have been numerous. Many individual problems have been worked out, some of which have led into further study for Masters' theses. On several occasions the entire class has participated in making surveys in the public schools of Denton and other cities, as well as in rural schools. Individual instruction in reading for periods of from six weeks to four months has been given to nearly a hundred children.

This kind of practice on the part of the students leads to the second purpose of the laboratory, that of service to the children and their teachers. Several hundred children, by actual count, have had their eyes checked for visual efficiency and their reading readiness, achievement, and types of reading errors studied. Many of these

¹ Margaret A. Stanger and Ellen K. Donohue, *Prediction and Prevention of Reading Difficulties*. New York: Oxford University Press, 1937.

children, as has been said above, have received effective aid from students working in the laboratory. A particular activity of the laboratory is the direction of a class in corrective reading in the Denton Junior High School. The resources of the laboratory are here extensively used, and the children are taught by a member of the advanced class under the supervision of the College instructor.

As to the third purpose of the laboratory, that of serving the College students at large, the original intention was to give whatever assistance was possible to individuals as they requested it. However, through the stimulus of the dean of the College, B. B. Harris, a program for the improvement of reading for Freshmen was undertaken last year. Letters of inquiry were sent to a number of colleges where students were being aided in their reading difficulties. The prompt and courteous replies received from the colleges were studied for ways and means. The suggestions received from the correspondence guided us in the organization of a class among the Freshmen for reading improvement. While the results of this first attempt were not remarkable, they were such as to cause Dean Harris to feel warranted in continuing the plan. During the first semester of 1939-40, the reading-improvement group numbered forty-five, and the College granted one semester hour's credit for the course. Students working in the laboratory course assist in the reading-improvement class.

Frequently individual students come to the laboratory for tests, advice, and information. Members of our advanced class work with these fellow-students, checking their visual efficiency, measuring their reading achievement and reading rate (a point which especially seems to trouble college students), and often guiding them in a series of practice lessons. Many students, it should be mentioned, have gone from the laboratory to oculists for examination and treatment.

OTHER SERVICES

The Reading Laboratory has frequent visitors. Public-school teachers come for suggestions, to see materials, and to ask for references on various problems, often bringing with them children whom they wish to have checked for causes of reading troubles. Too, it has been a pleasure to welcome as visitors instructors from other colleges,

supervisors, superintendents, and parents. No small part of the service which the laboratory tries to offer is the answering of numerous letters of inquiry concerning recent publications, materials, tests to be used, and corrective methods.

The interest and the enthusiasm of other departments of the College and members of the faculty have been important in the satisfactory progress to date of the Reading Laboratory. Faculty members frequently refer students to the laboratory for assistance. They recommend the reading courses to students majoring in their departments, share materials, give assistance, and generally indicate their belief that such a laboratory has a place in a teachers' college.

THE FUTURE OF THE LABORATORY

The College, with this beginning, looks forward hopefully to the growth of the laboratory. As our knowledge and experience in the field of reading are extended, we trust that the Reading Laboratory may become more effective in its preparation of teachers, that it may answer their questions with more accuracy and assurance, that service to the children and the students may be more efficient; that the relation of the Reading Laboratory to other departments on the campus may become closer. It is our sincere hope here at the College that the increased service will lead directly to a better and a more general understanding of the basic values and processes of reading in its relation to the educative growth at each and all levels of development.

SELECTED REFERENCES FROM THE LITERATURE ON EXCEPTIONAL CHILDREN

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THE references in the following bibliography from the literature on exceptional children are classified as follows: materials concerned with (1) subnormal, backward, and dull-normal children, (2) behavior and problem cases and dependent children, (3) juvenile delinquency, (4) superior and gifted children, (5) blind and partially seeing children, (6) crippled children, (7) deaf and hard-of-hearing children, (8) delicate children, (9) speech defectives, and (10) general references. The references in the first four of these classifications were compiled and annotated by Dr. Hildreth; those in the remaining classifications, by Dr. Ingram.

TRENDS NOTED IN LITERATURE ON THE MENTALLY EXCEPTIONAL CHILD

Several trends are evident in the recent literature and research studies relating to exceptional children. Much more attention than formerly is being paid to the dull and the slow-learning child as one who needs a curriculum different from that provided for normal children and yet unlike that provided for the mentally subnormal. There are frequent reports of a more practical and functional program for these children that includes the desirable features of the activity curriculum. There are more numerous and searching studies of environmental factors that contribute to wide individual differences in learning ability in school and out. Increasing attention to the problems presented by gifted children as they progress through school is reflected in many recent research reports. The gifted child is found to have his share of problems and to be in frequent need of guidance and adjustment service throughout his school career, but

segregation is not considered the most satisfactory answer to this child's peculiar learning requirements. More creative effort is directed toward expanding the curriculum for gifted children and relating it to the child's genuine purposes.

SUBNORMAL, BACKWARD, AND DULL-NORMAL CHILDREN

219. ABEL, THEODORA M. "Subnormal Girls with Discrepant Test Patterns," *Journal of Applied Psychology*, XXIII (June, 1939), 398-404.
An analysis of test scores for girls testing higher on nonlanguage material than on language tests. Results are compared with those for a group showing the opposite trend.
220. ABEL, THEODORA M., and SILL, JANE B. "The Perceiving and Thinking of Normal and Subnormal Adolescents and Children on a Simple Drawing Task," *Pedagogical Seminary and Journal of Genetic Psychology*, LIV (June, 1939), 391-402.
Characteristic differences in quantity and quality were found when groups of normal and of dull subjects were given instructions for dividing squares on paper into smaller squares.
221. BEAMAN, FLORENCE N. "Progressive Education for the Mentally Retarded Child," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 2 (1938), pp. 86-90.
Makes the recommendation that classes for the mentally retarded partake more of progressive-education principles and gives illustrations of curricular changes.
222. BRYNE, MAY E. "Program of Education for Mentally Retarded Children in a Public School System," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 2 (1938), pp. 116-22.
A description of the activities program developed for special-class children in Minneapolis.
223. COLEMAN, MARION U. "Remedial Reading for Special Groups," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 2 (1938), pp. 123-27.
A report of the work done in making diagnoses of reading deficiencies in mentally retarded children and in providing remedial instruction for them.
224. EWERHARDT, PAUL J. "Reading Difficulties in Subnormal Children," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 1 (1938), pp. 188-93.

Reading-disability cases among subnormal children are classified, and appropriate treatment is described.

225. GRILLI, HELEN A. "Teaching Slow Learning Children," *Social Education*, III (March, 1939), 169-72.

A teacher of classes for slow learners in Speyer School, New York City, describes methods used in teaching social studies to slow children of elementary-school age.

226. HAMLIN, ROY. "Test Pattern of High Grade Mentally Defective Girls," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 1 (1938), pp. 161-65.

A study of the relation between test-score patterns of defective girls and adjustment indicated by parole.

227. HANKINS, RUTH. *Principles of Teaching Exceptional Children in the Elementary Schools*. Child Research Clinic Series, Vol. III, No. 1. Langhorne, Pennsylvania: Child Research Clinic, Woods Schools, 1939. Pp. 24.

Lists and discusses thirty basic principles that underlie progressive practice in teaching exceptional children in the elementary school. Includes illustrations from actual cases

228. HANNA, AGNES K. "Some Observations on Extramural Care of Mentally Deficient Children," *Proceedings and Addresses of the Sixty-second Annual Meeting of the American Association on Mental Deficiency*, Vol. XLIII, No. 1 (1938), pp. 115-21.

A review of state and federal legislation providing care for mentally defective children.

229. HILDRETH, G. H. "Educational Provisions for Slow-learning Pupils," *Educational Administration and Supervision*, XXV (October, 1939), 491-512.

A report of a survey of educational provisions for slow-learning pupils in public schools throughout the country.

230. KEPHART, NEWELL C. "Notes on Social Group Structure in an Institution for Retarded Children," *Sociometry*, II (April, 1939), 95-98.

An effort is made in the cottage group plan at the Wayne County Training School, Northville, Michigan, to create a closely knit social structure which will give the individual child a secure social position and thus deter antisocial and self-centered activities.

231. LANE, ELIZABETH B., and KINDER, ELAINE F. "Relativism in the Thinking of Subnormal Subjects as Measured by Certain of Piaget's Tests," *Pedagogical Seminary and Journal of Genetic Psychology*, LIV (March, 1939), 107-18.

Describes the application of Piaget's brother-sister relation and right-and-left relation questions to Letchworth Village children. Data are summarized with reference to improvement in performance with rise in mental age.

232. *Meeting the Needs of the Mentally Retarded*. Bulletin No. 420. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 168.

The sections of this bulletin relate to the philosophy of special education, practical considerations in establishing special classes, standards for special classes, and class programs. An appendix contains bibliographical references, record forms, information about costs, and sources of equipment.

233. ORTLEB, RUTH. "The Needs of the Dull-normal Elementary School Child," *School and Society*, L (October 7, 1939), 453-61.

Summarizes the traits of dull-normal children and describes their school problems. Fourteen suggestions are given for meeting these problems, with emphasis on concrete learning situations and habit training.

234. RAVEN, J. C., and WAITE, A. "Experiments on Physically and Mentally Defective Children with Perceptual Tests," *British Journal of Medical Psychology*, XVIII (March, 1939), 40-43.

Physically handicapped children rated backward by their teacher scored normal on a perceptual test. Mentally defective children scored below normal.

235. ROGERS, WILLIAM C. "An Experimental Curriculum for Retarded Pupils," *Enriching the Curriculum for the Elementary School Child*, pp. 532-37. Eighteenth Yearbook of the Department of Elementary School Principals. Bulletin of the Department of Elementary School Principals, Vol. XVIII, No. 6. Washington. Department of Elementary School Principals of the National Education Association, 1939.

Describes an experimental program for mentally and educationally retarded pupils in Philadelphia who are twelve years of age or older and who have spent six years in school. The pupils are placed in an educational center where they have a nontraditional program at the junior high school level.

236. THOMPSON, WILLIAM H., and EDWARDS, FRANCES M. "The Reliability of Teachers' Reports about Subnormal Children Sent to the Child Study Bureau," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 2 (1938), pp. 98-104.

Reports sent by teachers when referring children for special or ungraded classes are found to yield valuable and reliable information.

237. WALSH, ELIZABETH A. "The Slow Learning Child in Our Public Schools," *Journal of Exceptional Children*, VI (October, 1939), 12-15, 32.

Gives a description of the work in handling mentally backward children done by the Bureau for Children with Retarded Mental Development of the New York City Schools.

238. WERNER, H., and STRAUSS, A. "Problems and Methods of Functional Analysis in Mentally Deficient Children," *Journal of Abnormal and Social Psychology*, XXXIV (January, 1939), 37-62.

Children who did not succeed in dealing successfully with concrete number forms failed when they were required to deal with abstract number operations. Various patterns of arithmetic disability are described.

239. WILCOX, CATHARINE J. "The Work with Retarded Children in the State of Virginia," *Proceedings and Addresses of the Sixty-second Annual Session of the American Association on Mental Deficiency*, Vol. XLIII, No. 1 (1938), pp. 128-36.

A report summarizing data relating to care and placement of mentally sub-normal children in Virginia.

BEHAVIOR AND PROBLEM CASES AND DEPENDENT CHILDREN

240. BAYLOR, M. H., and MONACHESI, E. D. *Rehabilitation of Children*. New York: Harper & Bros., 1939. Pp. xii+560.

A report of child placement by social agencies. Includes a historical survey and pertinent data regarding child placement and a description of placement activities in two New England agencies.

241. BENDER, L. "Behavior Problems in Negro Children," *Psychiatry*, II (May, 1939), 213-28.

Indicates that the rate of incidence for behavior problems among Negro children studied at Bellevue Hospital has increased in recent years. Gives an outline of the study and achievement afforded these children and of the nature of the problems that they present.

242. DESPERT, J. L. *Emotional Problems in Children*. Utica, New York: State Hospitals Press, 1938. Pp. 128.

A description and evaluation of the psychotherapy method for children used at the New York Psychiatric Institute. Case records are included.

243. DUREA, M. A. "Introversion-Extroversion and Problem Tendencies in Children," *Educational Research Bulletin*, XVIII (April 5, 1939), 103-6, 115-16.

An analysis of the relation between introversion and extroversion and problem tendencies in children is made by means of several rating schedules.

244. EDELSTON, H. "The Analysis and Treatment of a Case of Neurotic Conduct Disorder in a Young Child Illustrating the Value and Use of Drawing in Child Guidance Technique," *Journal of Mental Science*, LXXXV (May, 1939), 522-47.

Describes the clinical treatment and progress of a seven-year-old child with a marked behavior disorder.

245. HILL, ARTHUR S. "Can the Elementary Grade Teacher Identify Potential Behavior Cases?" *Journal of Exceptional Children*, V (February, 1939), 110-20.
A research study concluding that classroom teachers are unlikely to predict which children will later become adjustment problems of a severity warranting referral to an outside agency.
246. HIRSCH, N. D. M. "Relationship between Interest, Ability, and Self-estimated Ability among Maladjusted Boys," *Journal of Abnormal and Social Psychology*, XXXIV (July, 1939), 395-99.
In various intelligence levels and age groups, interests proved to be much more a wishful estimate of a child's ability than an accurate appraisal of his real ability.
247. PARTRIDGE, J. M. "Truancy," *Journal of Mental Science*, LXXXV (January, 1939), 45-81.
An analysis of fifty cases of truancy from home and school among boys and girls, with an indication of various causal factors
248. ROGERS, C. R. *The Clinical Treatment of the Problem Child*. Boston: Houghton Mifflin Co., 1939. Pp. xiv+394.
A book devoted to diagnostic and treatment procedure for maladjusted children. Research data relating to each type of treatment are summarized, and a bibliography is included.
249. SHERMAN, MANDEL "The Interpretation of Schizophrenic-like Behavior in Children," *Child Development*, X (March, 1939), 35-42.
A report of difficulties experienced in diagnosing seventeen cases and a summary of the common characteristics found in a group of schizophrenic children.

JUVENILE DELINQUENCY

250. BERMAN, NATHAN. "Juvenile Delinquency under the Soviets," *Journal of Criminal Law and Criminology*, XXX (May-June, 1939), 68-76.
A description of the Soviet program for rehabilitating the delinquent. The underlying philosophy is closely linked to the Soviet approach to life in general.
251. COOPER, COURTNEY RYLEY. *Designs in Scarlet*. Boston. Little, Brown & Co., 1939. Pp. 372.
A study of juvenile delinquency and organized prostitution based on facts obtained by the author from actual conversations and from personal visits to places contributing to the demoralization of adolescent boys and girls.
252. COX, W. B., and BIXBY, F. L. (editors). *Handbook of American Institutions for Delinquent Juveniles*. Vol. I. West North Central States. New York: Osborne Association, Inc., 1938. Pp. xiv+432.
A useful directory

253. DAVIDOFF, E., and BUCKLAND, G. "Reaction of a Juvenile Delinquent Group to Story and Drama Techniques," *Psychiatric Quarterly*, XIII (April, 1939), 345-58.
A control study in which the reactions of delinquents and nondelinquents to puppet and drama techniques were compared.
254. DELINQUENCY DIVISION STAFF, UNITED STATES CHILDREN'S BUREAU, "Children under Care of the State Training Schools for Socially Maladjusted Children," *Child*, Special Supplement, III (December, 1938). Pp. 16.
Summarizes data from ninety-five schools on age and residential status of socially maladjusted children
255. DOLL, EDGAR A., and FITCH, K. A. "Social Competence of Juvenile Delinquents," *Journal of Criminal Law and Criminology*, XXX (May-June, 1939), 52-67.
An analysis of data from the Vineland Social Maturity Scale indicates that the social competence of delinquents is strikingly below that of normal nondelinquents.
256. DUREA, M. A. "The Differential Diagnosis of Potential Delinquency," *American Journal of Orthopsychiatry*, IX (April, 1939), 394-98.
The future delinquent can be distinguished by traits observed in unadjusted cases.
257. FORD, CHARLES A. "Institutional Rearing as a Factor in Delinquency," *The Challenge of Progressive Education*, pp. 40-46. Proceedings of the Fourth Conference on Education and the Exceptional Child of the Child Research Clinic of the Woods Schools. Langhorne, Pennsylvania: Child Research Clinic, Woods Schools, 1938.
As the result of analyzing data for 691 cases of consistent delinquency, the author concludes that foster-home placement does not appear to be more advantageous than placement in child-care institutions.
258. HARRIS, D. B. "Use of the Anecdotal Behavior Journal in a Correctional School for Boys," *Journal of Juvenile Research*, XXII (July-October, 1938), 162-68.
The use of an anecdotal behavior record in the Minnesota State Training School for Boys is described, and its value to the teaching, clinical, and administrative staffs is indicated.
259. *Juvenile Court Statistics and Federal Juvenile Offenders*. United States Children's Bureau Publication No. 245. Washington. Government Printing Office, 1939. Pp. iv+156.
Information supplied by 398 juvenile courts in 1935, by 384 courts in 1936, and by the United States Department of Justice relative to juvenile courts throughout the country and federal juvenile offenses for a two-year period ending in 1936.

260. KARPMAN, BEN. "The Delinquent as a Type and Personality," *Journal of Criminal Psychopathology*, I (July, 1939), 24-33.
A discussion of the delinquent personality and a definition of delinquency. The author concludes "that there is no particular type or personality that may be characterized as being specifically delinquent."
261. KERR, WILLIAM. "How the Police Can Prevent Juvenile Crime," *Police Journal* (London), X (July-September, 1937), 206-14.
A description of ways in which the police, through exercising vigilance toward children and organizing and supervising their activities, can aid in preventing juvenile delinquency.
262. LEMESURIER, LILIAN. *Boys in Trouble*. London. John Murray, 1939 (second edition). Pp 320.
An account, from the lay point of view, of the backward methods of handling the Borstal boys with whom the author worked at Wormwood Scrubbs.
263. MANN, CECIL W, and MANN, HELENE POWNER. "Age and Intelligence of a Group of Juvenile Delinquents," *Journal of Abnormal and Social Psychology*, XXXIV (July, 1939), 351-60.
Summarizes data relating to the sex, average age, and average intelligence quotient of 1,731 juvenile delinquents.
264. MANN, CECIL W., and MANN, HELENE POWNER. "An Analysis of the Results Obtained by Retesting Juvenile Delinquents," *Journal of Psychology*, VIII (July, 1939), 133-41
A high degree of consistency was found on retesting 428 juvenile delinquents when first and subsequent intelligence quotients were compared
265. SAFFIR, MILTON A. "Behind the Delinquent," *Chicago Schools Journal*, XX (January-February, 1939), 105-9.
A discussion of two major approaches to the prevention of juvenile delinquency: character education and provision of desirable outlets for legitimate satisfaction
266. SHAW, CLIFFORD R. "Group Factors in Delinquency among Boys," *Proceedings of the Third Biennial Meeting of the Society for Research in Child Development*, 1938, pp. 14-26. Washington: Society for Research in Child Development, National Research Council, 1939.
Indicates that the gang initiates boys into delinquent careers, gives knowledge of delinquency techniques, forms attitudes and interests of the habitual delinquent, and provides the delinquent boy with certain satisfactions
267. SISISKY, FRANCES. "The Later Social Adjustment of a Group of Borderline Defective Delinquents Trained at the Oaks School," *Smith College Studies in Social Work*, X (September, 1939), 36-49.
A follow-up study of mentally borderline juvenile delinquents trained in an institution. Fifty per cent made good adjustment. It was possible for the staff to predict which boys would make good adjustments and what help they would need.

268. SPEER, GEORGE S. "Social Value of Agricultural Training for Delinquent Boys," *Social Service Review*, XII (December, 1938), 640-50.
Placement of delinquent boys in farm areas following parole from an industrial farm has tended to create more problems than it has solved.
269. TULCHIN, SIMON H. *Intelligence and Crime*. Behavior Research Fund Monographs. Chicago: University of Chicago Press, 1939. Pp. xiv+166.
A study based on psychological tests given to offenders in Illinois State Reformatory and Penitentiary. Furnishes data on the relation of intelligence to crime.
270. WIERS, P. "Juvenile Delinquency in Rural Michigan," *Journal of Criminal Law and Criminology*, XXX (July-August, 1939), 211-22.
Delinquency was found to be extensive in rural areas though less per capita than in industrial centers.
271. WRIGHT, C. A. "The Sex Offender's Endocrines," *Medical Record*, CXLIX (June 21, 1939), 399-402.
Evidence covering endocrine irregularities in seventy-three girl homosexual cases is reported, and treatment for the disorders is evaluated.

SUPERIOR AND GIFTED CHILDREN¹

272. BEAR, MATA V. "How St. Louis Schools Serve Their Bright Pupils," *Journal of the National Education Association*, XXVIII (April, 1939), 121.
A brief description of the activities carried on in regular classes by gifted children in St. Louis.
273. BLAIR, G. M. "Subject Preferences of Mentally Superior and Inferior Senior High-School Students," *Journal of Educational Research*, XXXIII (October, 1939), 89-92.
Mathematics is the subject best liked by mentally superior boys; shop, by the mentally inferior. Superior girls like English best; inferior girls, home economics.
274. DEPPENBROCK, AUDREY R., GOETZ, PEARL W., HERMON, HELEN, and MAHON, VIRGINIA L. (compilers). "Enrichment Activities for Capable Pupils," *Baltimore Bulletin of Education*, XVI (May-June, 1939), 165-75.
An account of enrichment programs carried on with gifted children in the elementary schools of Baltimore.

¹ See also Items 705 (Hollingworth) and 735 (Thorndike) in the list of selected references appearing in the December, 1939, number, and Item 147 (Rigg) in the March, 1940, number of the *Elementary School Journal*; and Item 347 (Blair) in the May, 1940, number of the *School Review*.

275. "The Education of Gifted Children in Secondary Schools," *Journal of Educational Sociology*, XIII (October, 1939), 65-126.
This number contains a series of articles prepared by leading authorities on the following topics: "Educating the Elite in Europe," "Educational Suggestions from Follow-up Studies of Intellectually Gifted Children," "Problems of Relationship between Elementary and Secondary Schools in the Case of Highly Intelligent Pupils," and educating superior students in the high schools of New York City and Los Angeles.
276. GOETSCH, HELEN B. "Inequality of College Opportunity," *Journal of the National Education Association*, XXVIII (December, 1939), 271.
A survey of the further-schooling status of 1,023 public high school graduates with intelligence quotients ranging from 117 to 146 showed that less than half were in college. There was a relation between size of family income and tendency to be in college.
277. GREENBERG, BENJAMIN B. "The Education of the Intellectually Gifted," *Journal of Exceptional Children*, V (February, 1939), 101-9, 124.
A description of various methods currently used in providing proper educational facilities for gifted children, with details concerning the work at the Speyer School, New York City.
278. MONTGOMERY, G. MILLAGE. "Special Arrangements for One School's Bright Pupils," *School Review*, XLVII (May, 1939), 328-30.
A brief description of special provisions for gifted pupils in a Los Angeles high school.
279. SCHUCK, MYRNA INGRAM. "Curriculum Enrichment for Rapid Learners," *Social Education*, III (March, 1939), 173-76.
A teacher in Speyer School, New York City, describes the methods used to enrich the educational program for children in the intelligence-quotient range of 130-200.
280. SIMMONS, R. M. *A Study of a Group of Children of Exceptionally High Intelligence Quotient in Situations Partaking of the Nature of Suggestion*. Teachers College Contributions to Education, No. 788. New York: Teachers College, Columbia University, 1940. Pp. x+112.
Statistically reliable differences were found when groups of subjects both high and low in intelligence were given objective tests of suggestion. Ratings disclosed group differences but were found to be valueless for individual diagnosis and comparison.
281. WILE, I. S., and DAVIS, R. M. "Behavior Differentials of Children with I.Q.'s 120 and above and I.Q.'s 79 and below, with Some Reference to Socio-economic Status," *American Journal of Orthopsychiatry*, IX (July, 1939), 529-39.
Problems and difficulties of the superior group are no less numerous than those of the inferior group although the superior group is more readily adaptable socially.

TRENDS NOTED IN LITERATURE ON THE
PHYSICALLY HANDICAPPED

The trends noted a year ago continue to be evident in the literature. These trends are, namely, the need for articulation between medical and educational programs, the need for personality study and for the mental-hygiene approach to the individual problem, the recognition of the preschool area as a significant field for studying the nature and the cause of deviation, and the study of vocational adjustments for the handicapped. Fewer significant studies of a research nature are reported in the literature this year. There is a continuing number of teacher observations, studies, and methods.

BLIND AND PARTIALLY SEEING CHILDREN

282. DAVIDSON, MARGARET, and BROWN, ANDREW W. "The Development and Standardization of the I.J.R. Test for the Visually Handicapped," *Journal of Applied Psychology*, XXIII (April, 1939), 229-39.
A study from the Institute for Juvenile Research, Chicago, describing the construction of a test in point-scale form for testing children visually handicapped.
283. FARRELL, GABRIEL. "Mental Hygiene for the Blind," *Mental Hygiene*, XXIII (April, 1939), 215-27.
The director of Perkins Institution and Massachusetts School for the Blind, Watertown, Massachusetts, discusses the nature of adjustments made by the blind, which indicate the need for the mental-hygiene approach in the educational program.
284. HILL, O. J. "Another Beam of Light through the Darkness," *Journal of Exceptional Children*, VI (January, 1940), 129-37.
Reports on the use of W.P.A. subsidy for preparing accurately scaled educational models of things which the blind can experience through the tactile sense. The models include animal forms and historic and architectural forms.
285. HITZ, JOHN B. "An Evaluation of Vision-testing Methods in Schools," *Sight-saving Review*, IX (March, 1939), 47-52.
A preliminary report of the use of the Snellen chart, the Betts telebinocular test, and an ophthalmic test, as a "screening process" for testing children's vision.
286. LÖWENFELD, VIKTOR *The Nature of Creative Activity*. New York: Harcourt, Brace & Co., 1939. Pp. xviii+272.
A Viennese teacher of the blind reports on experimental and comparative studies of visual and nonvisual sources of drawings, paintings, and sculpture made by partially seeing and blind children. The book contains copies of the children's art products on which conclusions are based.
287. MCVICKAR, OLIVE. "A Nursery School for Children with Impaired Vision," *Teachers Forum for Instructors of Blind Children*, XII (September, 1939), 12-16.

Describes the nursery-school program for children with impaired vision at the Boston Nursery for the Blind

288. PHELPS, SARAH LATIMER. "Motivated Handwork and Activity Units in Sight-saving Classes," *Sight-saving Class Exchange*, No. 70 (November, 1939), pp. 41-53.

A teacher suggests worth-while classroom activities and includes forty-one selected titles for reference, with a review for each.

289. PRINE, OLIVE. "Diagnostic and Remedial Techniques in Teaching Arithmetic," *Teachers Forum for Instructors of Blind Children*, XII (September, 1939), 6-10

A teacher discusses ways of discovering difficulties and of adapting the arithmetic curriculum to meet better the needs of visually handicapped pupils

290. ROSENTHAL, META. "The Psychological Touch in Straightening Cross-Eyes," *Sight-saving Review*, IX (March, 1939), 11-17

Discusses the place of the orthoptic clinic and the psychological guidance in the home that is necessary in assisting the child to overcome strabismus.

291. "Sight Conservation through Fuller Understanding of the Patient—A Symposium," *Sight-saving Review*, Supplement, IX (December, 1939), 3-28.

Three articles by medical case workers describe clinic eye-treatment and follow-up which take account of the background and the personality of the child and the adult. The significance of treatment is illustrated in case reports of individual patients

292. "Vocational Guidance and Opportunities," *Sight-saving Class Exchange*, No. 71 (February, 1940), pp. 5-41.

This number presents a series of articles on vocational guidance written by a group of teachers. Attention is given to means and values of guidance from the elementary school on.

CRIPPLED CHILDREN

293. BALL, GEORGIA. "Case Work with Crippled Children," *Family*, XX (April, 1939), 56-63.

The problems of adjustment of crippled children in the family, school, and community are not peculiar to the handicap but may be intensified by it. Treatment must be based on factors within the family and the resources in the community

294. DIMCHEVSKY, ESTHER M. "The Social Content of Work with Crippled Children," *Mental Hygiene*, XXIII (July, 1939), 421-31.

A psychiatric social worker discusses the worker's responsibility with respect to the personality needs of the handicapped. She uses striking illustrations of individual children and their parents who must face problems in adjustment.

295. HOOD, R. C. "Crippled Children's Services under the Social Security Act—Three Years Old," *Crippled Child*, XVI (April, 1939), 166-71.

The director of the Crippled Children's Division of the United States Children's Bureau discusses medical, surgical, therapeutic, vocational, and educational services that are being promoted under the Social Security Act in the forty-eight states and two territories.

296. PUSITZ, M. E. "Speech Correction in Cerebral Palsies," *Journal of Speech Disorders*, IV (September, 1939), 205-18.

A comprehensive description of cerebral palsy, with recommendations for physical treatment and speech work based on the psychological-psychiatric approach.

297. RINGMAN, BERNICE "A Summer Program for Crippled Children," *Journal of Exceptional Children*, VI (October, 1939), 26-32.

Discusses different kinds of recreational activities that can be made beneficial to the crippled child.

DEAF AND HARD-OF-HEARING CHILDREN

298. BLUETT, C. G. "Vocational Survey of the Graduating Class of the California School for the Deaf," *Volla Review*, XLI (October and November, 1939), 549-55; 615-20, 662.

The training officer of San Francisco's Bureau of Vocational Rehabilitation describes a survey, reports information on individual cases, and offers vocational suggestions.

299. GOLDSTEIN, MAX. *The Acoustic Method for the Training of the Deaf and Hard-of-Hearing Child*. St. Louis: Laryngoscope Press, 1939. Pp. 246.

The director of the Central Institute for the Deaf at St. Louis describes the acoustic method developed in his school. Graduated practical exercises for developing perception of tones and spoken language are outlined.

300. HICKER, H. D. "Co-ordination of Services for Vocational Adjustment of the Deaf," *American Annals of the Deaf*, LXXXIV (September, 1939), 322-31.

The chief of the Bureau of Vocational Rehabilitation of the California State Department of Education appeals for the co-operative effort of all services in vocational training, counseling, and placement of deaf persons.

301. JOHNSON, ELIZABETH HUGHES. "Testing Results of Acoustic Training," *American Annals of the Deaf*, LXXXIV (May, 1939), 223-33

At the Illinois School for the Deaf tests of (1) drill vocabulary, (2) speech intelligibility, (3) acoustic understanding, (4) acoustic understanding combined with speech reading, and (5) speech reading were given to deaf and hard-of-hearing children following full-time use of the earphone in their classes. The conclusion is that the degree of success in speech and lip reading is directly related to the extent to which hearing is trained.

302. KNUDSEN, VERN O. "The Golden Age of Hearing Aids," *Volla Review*, XLI (November, 1939), 613-14, 664-65.

Discusses the construction and the advantages of the vacuum-tube aid and its present limitations. The advantages of binaural hearing aids over the monaural are also stated.

303. MASON, MARIE K. "Individual Deviations in the Visual Reproduction of the Speech of Two Speakers," *American Annals of the Deaf*, LXXXIV (November, 1939), 408-24.

Reports a study to determine the extent of individual differences existing in the visual speech characteristics of two speakers and to provide a simple objective means of rating these reproductions. Comprehensive conclusions resulting from the experiment are stated.

304. ROSENTHAL, DORA A. "The Employment Status of the Deaf and Hard of Hearing in Chicago," *Volta Review*, XLI (June, 1939), 336-37, 374-75.

A teacher reports questionnaire returns from fifty-one deaf and hard-of-hearing persons. The variety of jobs filled and the satisfactory reports of employers indicate success for the large majority.

305. "Vocational Education in American Schools for the Deaf," *American Annals of the Deaf*, LXXXIV (January, 1939), 34-35.

Presents a classified list of vocations which are at present taught in schools for the deaf with the direct purpose of fitting the pupils for some gainful occupation.

DELICATE CHILDREN

306. DAVIS, DAVID B. "The Epilepsies," *Journal of Exceptional Children*, V (April, 1939), 166-75, 178.

Describes the various convulsive states of epilepsy and discusses new methods of study by encephalography and electro-encephalography.

307. LEVANDOWSKI, RHEA. "Attitudes toward a School Program in a Hospital," *Crippled Child*, XVII (August, 1939), 40-44.

A symposium by teachers in which they report the development and growth in wholesome attitudes of individual children as a result of a hospital teaching program.

308. MATHEISON, CLELE LEE. *Hospital Schools in the United States*. United States Office of Education Bulletin No. 17, 1938. Pp. 80.

Presents an analysis of existing legislation concerning hospital schools and an investigation of present practices in 162 hospital schools in thirty-three states and two territories.

309. PATRY, FREDERICK L. "Psychiatric Principles in Educational Methodology with Special Reference to Epileptics," *Journal of Exceptional Children*, VI (October, 1939), 3-6, 21.

A psychiatrist states twenty-two principles which should be taken into account by the teacher guiding a child who suffers from epilepsy.

310. *The Physically Below-par Child*. Report of the Committee on the Care and Education of Below-par Children. New York: National Tuberculosis Association, 1940. Pp. 20.

The findings and conclusions concerning the care and the education of children with lowered vitality are reported by a representative committee of educators, hygienists, nutrition workers, and physicians.

SPEECH DEFECTIVES

311. BOOME, E. J., BAINES, H. M. S., and HARRIES, D. G. *Abnormal Speech*. London: Methuen & Co., Ltd., 1939. Pp. 174.
A treatise on all forms of speech disorder—functional, organic, and psychogenic. Methods of treatment are prescribed, including descriptions of remedial exercises.
312. BUCKLEY, H. M. "How Speech Training Is Conducted in the Cleveland Public Schools," *Quarterly Journal of Speech*, XXV (April, 1939), 200-204.
A report of a year's work in the Cleveland schools, with special reference to the contribution which kindergarten and first-grade teachers can make in correcting speech defects in the classroom.
313. CARD, ROBERT E. "A Study of Allergy in Relation to Stuttering," *Journal of Speech Disorders*, IV (September, 1939), 223-30.
Reports a study of 104 case histories of stutterers and their families with respect to allergic symptoms. The similarities between the factors of stuttering and asthmatic reactions, together with positive histories of allergy in the stutterers' families, suggest advisability of further study of these relationships.
314. DAVIS, DOROTHY M. "The Relation of Repetitions in the Speech of Young Children to Certain Measures of Language Maturity and Situational Factors, Part I," *Journal of Speech Disorders*, IV (December, 1939), 303-18.
This study from the University of Iowa on the extemporaneous speech of each of sixty-two children, from twenty-four to sixty-two months of age, shows that repetition of syllables, words, and phrases combined gave a fairly normal distribution for all the children. These data indicate that repetition is part of the speech problem of all children. Further research will be carried on.
315. FAGAN, H. R. "Methods of Treatment for Spastic Speech," *Journal of Speech Disorders*, IV (March, 1939), 25-32.
Presents in detail methods of treatment for spastic speech used with success in training nine children ranging in age from three to fourteen years. Most of the cases were complicated by aphasia or deafness accompanying the motor disorder.
316. GIFFORD, MABEL FARRINGTON. *Correcting Nervous Speech Disorders*. New York: Prentice-Hall, Inc., 1939. Pp. xvi+198.
The director of speech correction and defects of the California State Department of Education describes the techniques used for the correction of stammering in the California schools. The emotional aspects of behavior in teacher and pupil are recognized as a significant element in the treatment plan.
317. TEMPLIN, MILDRED, and STEER, M. B. "Studies of Growth of Speech of Preschool Children," *Journal of Speech Disorders*, IV (March, 1939), 71-77.

A first report in an intensive study of speech in preschool children. The growth in articulatory development was recorded regularly by speech clinicians.

318. VAN RIPER, CHARLES. *Speech Correction*. New York: Prentice-Hall, Inc., 1939. Pp. xx+434.

A textbook designed to give a basic knowledge of the principles and methods of speech correction, not only to help the speech specialist, but also to encourage co-operation in a speech program on the part of all the school personnel. It deals with the nature and the development of speech in young children, its relation to personality development, and the diagnosis and detailed methods of treatment for speech and voice disorders.

319. WEST, ROBERT; NELSON, SEVERINA; and BERRY, MILDRED. "The Heredity of Stuttering," *Quarterly Journal of Speech*, XXV (February, 1939), 23-30.

An analysis of heredity, social contacts, and sex is made from complete data on 204 stutterers and 204 control subjects. Results suggest that the tendency to stutter is transmitted from generation to generation and that certain environmental factors may contribute to the development of the malady.

GENERAL REFERENCES*

320. BLUETT, C. G. "Objective Analysis in Vocational Placement," *Volla Review*, XLI (March, 1939), 133-35, 179.

The training officer of the San Francisco Bureau of Vocational Rehabilitation offers data on objective tests for selected cases which illustrate the function of such tests in job retaining.

321. GOOD, CARTER V. "Research Methods and Problems of Exceptional Children," *Journal of Exceptional Children*, V (May, 1939), 203-8.

Reports that less than 5 per cent of the Doctors' and less than 3 per cent of the Masters' theses undertaken in 1935-37 treat problems of exceptional children. From 1937 to 1939 about 5 per cent of the Doctors' theses treated these topics. A broadening concept of special education is advised.

322. MARTENS, ELISE. "Residential Schools for Handicapped Children," *School Life*, XXIV (March, 1939), 166-68.

States the number cared for in twenty-four-hour schools throughout the United States for deaf, blind, mentally retarded, and delinquent children. The educational contribution of these schools to the general education program for all children is noted.

323. "Special Schools in Latin America," *Volla Review*, XLI (July, 1939), 396-98, 424.

Lists the names and addresses of special schools for mentally and physically handicapped pupils in countries of Latin America.

* See also Item 283 (Stafford) in the list of selected references appearing in the March, 1940, number of the *School Review*

Educational Writings

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REVIEWS AND BOOK NOTES

THE PHILOSOPHY OF EDUCATION RESTORED TO ITS RIGHTFUL POSITION.—Professor Brubacher has made an important contribution¹ to the study of the philosophy of education. He has recognized, and has sought to avoid, the danger of separating the philosophy of education from the field of general philosophy. "Beneficial as this specialization has been, it has, perhaps, gone too far. Educational philosophy has tended to slip its moorings to general philosophy, especially under the leadership of pragmatism, which some indict as a veritable denial of the possibility of philosophy" (p. vii). Too long now have students of the philosophy of education been exposed to one school of thought without even knowing, unless they already bring to the study a rich background of general philosophy, that other schools of thought and other methods of approach to the problems of education are possible. Or, if they do hear of the existence of other views, they tend to wipe them off the slate by such clichés as "traditional," "authoritarian," or "undemocratic." It almost seems as if those who have been most vociferous in decrying indoctrination have themselves been most guilty of the alleged offense which they attack. The result has been that, when the student is confronted with conflicts of opinion, he is unable to determine what the basic issue in the conflict is or to recognize that there are problems in philosophy to which thinkers have devoted their attention for centuries. It is possible to respect a person who has studied conflicting points of view in philosophy in general and in the philosophy of education in particular, he has at least weighed, judged, discriminated, and made his choice. It is not possible to have the same respect for a person who accepts ready-made a philosophy without even knowing that other philosophies have existed and are still current.

This situation Professor Brubacher has sought to correct. As he states in his Preface, he has limited himself to description and exposition and has refrained from giving his own views. "In contrast, it is rather the object of this endeavor to present in a form as unbiased as possible the alternate possibilities on which the careful student may base his own philosophy of education" (p. ix). But Professor Brubacher has done more; he has brought back to the attention of the serious student a number of questions which are of fundamental significance in any consideration of education and which explain differences in current points of view more basically than do the allegations of conservative or radical prej-

¹ John S. Brubacher, *Modern Philosophies of Education*. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xiv+370 \$3.00.

udices on social and political outlooks. The so-called "essentialist" and the so-called "progressive" may stand for the same social or political purposes, but the differences between them can be understood only in the light of their differences on philosophical issues.

It is for this reason that Professor Brubacher's work is to be commended for departing from what, with few exceptions, has in recent years come to be regarded as covering all that a student needs to know about the philosophy of education. After defining the "Scope and Function of Educational Philosophy," the author proceeds immediately to a discussion of the "Metaphysical Bases of Education," and the "Epistemological Bases of Education," both of which have been left out of current discussions, with consequent misunderstanding of issues. "Educational Values" are then analyzed and followed by another important consideration of the "Philosophical Aspects of Educational Psychology." From this point on, the author proceeds to take up many of the problems which have received major attention in recent years: "The Individual, Society, and Education," "Education and Political Theory," "Education and the Economic Order," "The Civil State and Education," "The School and Social Progress," "The Educative Process," "Religion, Morals, and Education," and "Systematic Philosophies of Education."

Professor Brubacher has successfully carried out the task which he set himself of presenting conflicting points of view on every one of the issues which he raises. As the editor of the series, Dean Harold Benjamin, says of the book in his Introduction: "For the educational theorist, it offers a listing of viewpoints against which his own philosophy may be compared and checked for practical implications. For the general student of education, it furnishes a complete and stimulating treatment of the field of educational philosophy" (p. xiv). With this statement the reviewer heartily agrees, but he is disposed to raise the question whether the book would not have been enriched if Professor Brubacher had gone beyond description and exposition and presented his personal points of view. The serious student will not find this a simple book (one wonders whether a great deal of harm has not already been done by the apparent simplicity of many recent philosophies of education), but he will be repaid for his efforts in studying it.

I. L. KANDEL

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DETAILED HELP FOR THE STUDENT AND TEACHER OF READING.—Witty and Kopel's book¹ will be found of great interest and importance to all who are concerned with reading in the schools. It presents, in its 374 pages, a philosophy, a review of methods, and a report of significant research up to date. The authors

¹ Paul Witty and David Kopel, *Reading and the Educative Process* Boston: Ginn & Co., 1939 Pp. x+374 \$2 50.

adhere throughout to the point of view expressed in the first two chapters: that reading should be an integral part of an education which prepares for life through an ever-expanding range of experiences based on interests. In fact, the second chapter, "Interest as a Factor in Reading," expresses the conviction of the authors that interest is the mainspring of remedial reading as of all reading. This chapter, with a bibliography of 128 items, is an excellent summary of the literature on children's interests in reading. Then follows a chapter on "Identifying the Poor Reader," in which the authors state plainly the gist of their experience in handling the problem and thus give a sort of preview of much that is to follow. The chapter will be of great immediate help to the classroom teacher who wants to know, in as direct terms as possible, just how he is to approach the problem of the poor reader. The next two chapters summarize remedial methods in elementary and secondary schools. Detailed reports of the authors' work in this field are given. In their comments on the various experiments the authors do not hesitate to express their disapproval of the "mechanical approach" and of methods that merely try to "eliminate symptoms." Their own conclusion is that "an effective program of remedial instruction must aim toward change in the whole child and his adjustment to his environment in and out of school" (p. 144).

The next topic is "The Prevention of Reading Difficulties," which is practically a summary of the huge literature on reading readiness (126 references at the end of the chapter). Here it might be suggested that even beyond Grade I steps may be taken to prevent reading difficulties. Then follows "The Causation and Analysis of Reading Difficulties," which is a summary of the research in this field (178 references on twelve possible causal factors). The next chapter is devoted to clinical procedures, especially as used at the authors' own clinic. The final chapter, "Trends in Reading Instruction," again emphasizes the newer philosophy in education and its relation to reading.

This book is notable for its emphasis on reading as part of the general educative processes rather than merely as a collection of skills, though it does not fail to give these skills their proper attention. The book is also notable as a summary of research and discussion from many sources. An eight-page index makes possible easy reference to individual items. The book seems to be planned for college classes in which there is guidance in comparison and evaluation of conflicting evidence and for which there are ample library facilities. The bibliographical references listed (some of them unfortunately rather old) total 585. The only question concerning the wide usefulness of the book is whether the classroom teacher, unskilled in handling masses of data, may not have difficulty in locating answers to his questions.

At the end of the book are fifty-five pages of appendixes giving forms used in the authors' reading clinic, especially their valuable "Interest Inventory", lists of reading tests (without evaluation); and a list of sources of reading ma-

terials, with a brief comment on each. These are valuable in further explaining the authors' work and point of view.

As said above, this book is a scholarly and capable piece of work which demands the attention of all who are interested in reading problems.

University of Illinois

E. W. DOLCH

THE SCHOOL AS A CO-OPERATIVE ENTERPRISE.—Within the past quarter-century changing concepts of the aims of public education have forced administrative theory and practice steadily in the direction of clearer recognition of the necessity for co-operative endeavor on the part of the schools and other social institutions in the communities that they serve. When the aim of education was mere literacy or the mastery of narrowly defined fields of subject matter, the function of schooling was unique and the school a self-sufficient unit, although inseparable from its community setting. With the gradual broadening of the purposes of education to include preparation for citizenship, the promotion of health, the enjoyment of leisure, and the attainment of social and vocational efficiency, the evolving program of the schools assimilated, in increasing measure, the methods and the endeavors of surrounding institutions and agencies whose interests or functions were visibly identified with the acquired objectives of education. These trends are clearly reflected in the literature of school administration, for the numerous writings pertaining to this aspect of administration during the past ten or fifteen years have assumed the proportions of a special field of study and investigation rather commonly referred to as school and public relations. A particularly good expression of the ideology underlying the community concept of the American public school is presented in one of the later contributions to this field.¹

The twenty chapters of this book are grouped under five divisional titles. The significant theme of the first division is the historical development of the school organization and the evolving social interest in public education. The several chapters of the second division describe the points of contact of school and community and the media and the agencies available for extending the influence of the school as a social institution. In the third division reference is made to state and national organizations which serve to stimulate and nurture school and community co-operation. The last two divisions deal with problems and policies pertaining to the planning and the administering of public-relations programs to be projected by the schools. The presentation is characterized by effective organization, good style, and aptness of illustration. The impressively comprehensive treatment indicates extensive study and research. Problems are

¹ William A. Yeager, *Home-School-Community Relations. A Textbook in the Theory and Practice of Public School Relations*. Pittsburgh, Pennsylvania. University Book Store, University of Pittsburgh, 1939. Pp xxii+524.

identified specifically, and remedial and constructive procedures are outlined in appropriate connections.

The basic concept of the author's program of school and community relations is expressed in the following quotation from the Preface:

This text then recognizes the total educational and social pattern of living present in any community. The home, the school, the church, clubs and recreation centers, and all agencies and institutions of any community are conceived collectively as dominating influences in the life of the child educationally. The public school has been placed in a central position of leadership and direction, in order that the educational influencing situation of the others may be properly co-ordinated, *which is its primary duty to perform* (p. x).

This concept consistently motivates the discussion and proposals throughout the book, but there is a conspicuous omission of local governmental agencies from the author's inclusive category of "all agencies and institutions of any community." In his numerous effective pleadings for co-operation on the part of all agencies concerned with the educational and social welfare of the child, there is a studied avoidance of reference to the indispensable services of the departments of municipal government which are concerned with such vital factors in the education of the child as health, recreation, safety, and social welfare. It is conceded that, when the parents are not able to safeguard properly their children from the pitfalls of delinquency and crime, "the help of probation officers, the courts and institutional and other agencies is useful" (p. 290), but the examples of school and community co-operation which are cited do not include the notable instances of effective co-operation between school and municipal departments. In so careful a delineation of the numerous lines of possible co-operation between the schools and organized community life, it is disappointing to the reader and unfortunate for education that essential functions and many valuable contributions of municipal government are slightly regarded.

NELSON B. HENRY

University of Chicago

AN INTEGRATION OF PROGRESSIVE THEORIES.—For a generation discontent with educational traditionalism has definitely expressed itself in attempts to formulate a better teaching procedure for American public schools. Since 1917 the Lincoln School of Teachers College, Columbia University, has contributed its influence to the forces of educational reform. Now that this school has come of age, its principal, Lester Dix, has decided to celebrate the event with an analysis of the practices of the school and the formulation of a program for the future. Indeed his book¹ offers a program designed to show the way for progressive education in general.

A glance at the chapter headings will show the reader the general direction

¹ Lester Dix, *A Charter for Progressive Education*. New York: Teachers College, Columbia University, 1939. Pp 108. \$1 60.

of the author's thought: "A Progressive School Comes of Age," "The Fundamental Outlook," "A Modern Conception of Learning," "Education for American Democracy," "Principles Underlying an American Curriculum," "Current Curriculum Trends," "A Plan for the Emerging Curriculum," "A Plan for Curriculum Building and Teaching," "Resources for Curriculum Building and Teaching," "Scheduling a Modern Program," "A School Program for Teachers Colleges," and "A Strategy for Progressive Education."

On a scale of general social attitude, beginning at the right with the conservative defenders of the *status quo* and passing through liberalism to the region of radicalism on the left, one finds the term "progressive" used for everything from a timid departure from the traditional to a reckless disregard of the values of past experience. In other words, the range covered by the term does not permit the definitive location of an individual, group, or theory to which it is applied. In his effort to unify progressive ideology, Dix therefore confronted the problem of defining a particular outlook and describing the elements that seem consistently to belong therein. He begins, appropriately, with basic assumptions and ends with a plan for the school curriculum of tomorrow.

Philosophies of education and of life show their most irreconcilable differences in the presuppositions with which they start. The plan of education outlined in this book is built on a philosophy that is relative, experimental, operational, creative, and individualistic. The adoption of this philosophy means that knowledge of the external world is regarded as tentative; that it is arrived at by trial reactions; that the ideational units of knowledge are, in essence, plans of action; that the content or subject matter of knowledge is the product of this activity; and that respect for individuality is the first principle of education, as it is of democracy. A complete discussion of these basic assumptions would require a treatise on pragmatism and alternative philosophies. Suffice it to say that the author, in his proposed charter, has not permitted his interest in the personality-centered curriculum and individual values to obscure the importance of subject matter. He favors a "directly functional curriculum," which takes its point of departure in individual needs and aims at the continuous development of pupil experience in the direction of the highest achievements, or values, in the humanities and in the natural and social sciences (see chart on page 62). Such a curriculum, as the author suggests, is designed to preserve the "important gains of the society-centered plan" and at the same time provide "a planned curricular area of individual development" (p. 55).

The reviewer believes with the author that such a plan "would most certainly represent a larger view of the total educational problem" (p. 55). One may refer to the theory as bipolar in character.

The value of this publication lies in its suggestive value for those who have turned their backs on the traditional school and are seeking a progressive and consistent approach to better things.

FREDERICK S. BREED

University of Chicago

A USEFUL REVISION OF A USEFUL BOOK.—The second edition of Chenoweth and Selkirk's textbook¹ continues to maintain the standards of excellence set by its predecessor. Its value has been enhanced, moreover, by the addition of two chapters, one dealing with the sanitation of the school and the other with the teaching of health. Several new illustrations in the chapters on sight and on the physical examination of children also add to the attractiveness of this edition. Of value also is the material found in the Appendix on quarantine regulations and reading disability.

The scope of the book is such as to serve the needs of all school health workers—teachers, nurses, dentists, and physicians. It has been written primarily for the purpose of giving a scientific basis for school health work. It incorporates, however, many suggestions which touch primarily on the educational aspects of the school health program. In many respects the book is a veritable encyclopedia of information for the person wishing to make a careful study of school health problems. Of especial value to the student are the references for further study found at the close of each chapter. The person without scientific training will also find helpful the glossary at the back of the book.

The publication is to be especially recommended for students engaged in securing graduate training in school health education. There is available today no other textbook which describes so adequately the health-service activities engaged in by school health workers. The value of this book lies in its scientific accuracy and adherence to principles long recognized as sound by leading school health authorities.

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A TEXTBOOK IN SCIENCE FOR THE JUNIOR HIGH SCHOOL.—Beauchamp, Mayfield, and West's new book² is designed primarily as the third book in a series of three for use in Grades VII, VIII, and IX. It does not replace the textbook by Pieper and Beauchamp written for the first year of the high school, although it might be used in the high school in a community in which the elementary schools use Books I and II or have a well-organized science curriculum.

The book is organized on the unit plan—a plan of which the authors in previous books have proved themselves to be masters. The first three units deal largely with plants and animals. Because of the interest of both boys and

¹ Laurence B. Chenoweth and Theodore K. Selkirk, *School Health Problems*. With a Chapter on School Health Administration by Richard Arthur Bolt. New York: F. S. Crofts & Co., 1940 (second edition). Pp. xii+420. \$3.00.

² Wilbur L. Beauchamp, John C. Mayfield, and Joe Young West, *Science Problems for the Junior High School*, Book III. Chicago: Scott, Foresman & Co., 1939. Pp. x+756. \$1.68.

girls in these subjects and because of the pupils' previous experience with them, these topics serve as a good beginning in the study of general science.

Throughout the book frequent examples taken from the common experiences of boys and girls are used in introducing new subjects. Important, too, is the recognition of the value of the historical approach to new fields.

The book is well illustrated with up-to-date pictures and drawings; in fact, there are few pages that do not have at least one illustration. The use of pictures of pupils performing simple experiments is to be commended.

One of the most important features of the book is the method of approach to scientific principles. The authors attempt (1) to lead the pupil to see the importance of supporting evidence and orderly approach to generalizations and (2) to develop in the pupils some elements of the scientific method by constant use of examples.

ALLEN R. MOORE

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AN EVALUATION OF THE "ELEMENTARY SCHOOL JOURNAL" AS A PROFESSIONAL MAGAZINE

A REPORT recently submitted by Ruth Watson Alberts to the faculty of the Graduate Library School of the University of Chicago bears the title "Evaluation of Educational Journals from the Standpoint of Research." When it is recalled that in this country between five and six hundred journals are published in the field of education, the need of some criteria of selection becomes obvious. Workers in education need an evaluation of journals both with respect to the quantity of the reliable research findings that are reported and with respect to the fields of special interest that the articles cover.

The report referred to in the preceding paragraph attempts such an evaluation. The method followed was to tabulate all the references to educational periodicals found in the fifteen issues of the *Review of Educational Research* from February, 1936, to December, 1938. The total number of citations and the total number of pages represented by the citations for each of the journals were tabulated. The reader will recall, of course, that the *Review of Educational Research* is published by the American Educational Research Associa-

tion, which is composed of persons engaged in technical research in education, including directors of research in school systems, instructors in educational institutions, and research workers connected with private educational agencies. Each year the association publishes five monographs reviewing the research findings in five important areas of educational interest. In a three-year cycle the whole field of education is covered. The fifteen subdivisions covered are: educational sociology; teacher personnel; school organization; finance and business administration; school plant and equipment; pupil personnel, guidance, and counseling; psychology of learning, general methods of teaching, and supervision; mental hygiene and adjustment; curriculum; special methods and psychology of the elementary-school subjects; psychology and methods in high school and college; mental and physical development; psychological tests and their uses; educational tests and their uses; and history of education and comparative education. Inasmuch as few references to periodical literature were found in the number of the *Review* dealing with the history of education, this subdivision was left out of further consideration.

A total of 484 periodicals were found to be mentioned in the bibliographies included in the numbers of the *Review of Educational Research* analyzed. A decision was made to include only those periodicals which were cited six or more times in the subjects represented. This procedure eliminated 348 magazines and left 135 periodicals for detailed study (the *Review of Educational Research* being excluded, of course).

We feel that we owe it to our readers to report the findings with respect to the *Elementary School Journal*. The reader will detect, and we hope forgive, a certain pride and satisfaction felt by the editor in making this accounting to the "stockholders."

Of the 135 periodicals, the *Elementary School Journal* ranks among the first ten in six of the fourteen special fields. It ranks first in the field of the curriculum; second in special methods and psychology of the elementary-school subjects; fourth in pupil personnel, guidance, and counseling; sixth in educational tests and their uses; ninth in school organization; and tenth in finance and business administration. It has a rank of 11.5 in teacher personnel and 14 in psy-

chology of learning, general methods of teaching, and supervision. The accompanying table compiled from the data of the report indicates the rank of the *Elementary School Journal* in all the fourteen special areas.

RANK OF "ELEMENTARY SCHOOL JOURNAL" IN SPECIAL AREAS
OF EDUCATIONAL RESEARCH

Area	Rank	Area	Rank
Curriculum	1	Psychology of learning, general	
Special methods and psychology		methods of teaching, and super-	
of elementary-school subjects.	2	vision.	14
Pupil personnel, guidance, and		Mental hygiene and adjustment	22
counseling	4	Educational sociology	29
Educational tests and their uses . .	6	Psychological tests and their uses	32
School organization	9	Psychology and methods in high	
Finance and business administra-	5	school and college	32 5
tion	10	Mental and physical development	36
Teacher personnel	11	School plant and equipment . . .	. . . .
	5		

In addition to ranking relatively high in a number of the special fields, the *Elementary School Journal* is also ranked as one of the most comprehensive periodicals. *School and Society* is ranked as the most comprehensive journal, and the *Journal of Educational Sociology* and the *Elementary School Journal* are tied for second place. Of the fifty journals to which citations are most frequently made in the bibliographies of the fourteen special fields, only eleven contribute to eleven or more fields. The *Elementary School Journal* touches thirteen of the fourteen fields.

NEXT STEPS IN AMERICAN EDUCATION—RECOMMENDATIONS OF THE WHITE HOUSE CONFERENCE

THE White House Conference on Children in a Democracy has issued a preliminary statement on "Education through the School." Attention is given to such matters as educational opportunity for every child, additional school services required, redirection of school experiences, improvement of environmental influences, and research and planning for children's needs.

The following summary of recommendations indicates the next steps in American education as the conference sees them.

Democracy is dependent upon the educational opportunities made available to all citizens. This nation cannot afford to deny any of its children the privilege of attending a good school. Within the community the school is but one institution among many that serve the child; it is the only one primarily concerned with his education. The strengthening of democratic government requires education for every child adapted to his needs and capacities.

The White House Conference on Children in a Democracy recommends these next steps to the American people:

- I. Every child should be able to attend a well-equipped school, staffed by competent teachers, within reasonable distance of his home. This can be achieved only through—

- Larger units of local administration planned on a state-wide basis;

- Increased state support of local schools such as will reduce inequalities in educational opportunity;

- Federal aid for education distributed among the states in such a way as to reduce educational inequalities;

- Financial aids for needy children to make possible their attendance at school;

- Improved general and professional education of teachers with particular emphasis on child growth and development;

- More adequate and suitable school facilities to meet new requirements of the educational program.

- II. Every child should have learning experiences that are adjusted to his individual needs and that encourage the development of attitudes and skills necessary for democratic living. This requires—

- Provision of kindergarten or similar preschool experience for every child;

- Revision of teaching procedures and school organization to make possible richer learning experiences in school and community and to assure continuous progress of the child;

- Arrangement of individual programs adjusted to the growth pattern and individual needs of each child;

- More effective education of the child in human relationships, healthful living, use of leisure, preparation for an occupation, ethical standards, and civic responsibility;

- Co-operation of the school with other institutions and agencies that serve the child;

- Education of parents through the school to make possible better educational opportunities for the child in the home.

- III. Every school system should provide school opportunity and vocational preparation, based on adequate vocational guidance, for all youth. This makes necessary—

- Provision of secondary-school opportunities for youth up to eighteen or twenty years of age;

Effective guidance leading to the development of occupational plans during the secondary-school period;

Prevocational preparation for all youth about to complete their formal schooling;

Broad vocational education within the secondary school for youth who will later have intensive training for skilled trades;

Co-operation of the school in the guidance and placement of out-of-school youth;

Continued educational opportunity in school for youth who have already started their occupational careers.

IV. Continued progress necessitates research and planning for the better education of the child. There is need for—

Establishment of research divisions by local school systems, wherever possible, and by all state departments of education;

Increased budgets for the United States Office of Education to permit the extension of research and related services;

Planning of educational policies and programs at all levels based on the findings of research.

DO PUPILS PREFER MARRIED TEACHERS?

IN A recent issue of the *School Executive* Dennis A. Cooke and Clinton O. McKee report the findings from a study of pupil attitude toward married and single women teachers. Pupils in Grades VIII and XII in ten schools in a Tennessee county were asked to answer thirty-two questions concerning the women teachers who had taught them during the three years immediately preceding. The pupils had no way of knowing that a comparison of single and married women teachers was being made. The total number of pupils involved was 267 in Grade VIII and 193 in Grade XII. The total number of teachers involved was 256. A correction was made for the fact that the pupils had not been taught by the same number of single and married teachers during the three-year period. The following statement reports the results of the inquiry.

Who had the best personality? The married women teachers were preferred by the eighth-grade pupils and the single women by the twelfth graders

Who had the best knowledge of subject matter? The preferences are reversed here. The eighth graders very definitely favor the single women, while the twelfth graders show an equal preference for the married and single women teachers

Who was the best-natured teacher? Married women are preferred by the eighth-grade students by a count of 7 to 3, while the single women are favored by the twelfth graders by a vote of 5 to 4.

Who was the fairest teacher? The eighth graders say the married women, but the twelfth-grade students favor the single women.

Who has been the kindest to you? Again the two groups of pupils are divided. The eighth graders say the married women, while the other group prefers the single teachers in this respect.

Who had the most patience? The eighth graders are equally divided in their preferences here, but the twelfth graders favor the single women.

Who had the most interest in the school? By a vote of 7 to 3 the eighth-grade pupils believe that the married women had more interest in the school than did the single women, while the twelfth graders are equally divided on this question.

Who had the best health? As usual the two groups of pupils are divided in their answers. The eighth graders vote 6 to 4 for the single women, while the twelfth graders report 8 to 2 for the married women.

Who was the best disciplinarian? Again the eighth-grade preferences are equally divided, but the twelfth graders very definitely favor the married women insofar as discipline is concerned.

Who had the best personal appearance? Both groups are equally divided. There is no preference here.

Who was the most honest with you? Again the eighth graders have no preference, but the twelfth graders are very definitely of the opinion that the married women are more honest than the single women.

Who was the best leader? Again both groups are equally divided. Neither group has a preference.

Who had the best self-control? The eighth graders indicate no preference, but the twelfth-grade students have a slight preference (5 to 4) for the single women.

Who showed the best co-operation? The eighth-grade students are quite sure that the married women are more co-operative, but the twelfth graders prefer the single teachers in this respect.

Who was the most attractive? The eighth graders say the married women, while the other group votes for the single teachers.

Who was the most original? The single teachers are more original as judged by the eighth-grade pupils, but the twelfth graders say that the married women are the more original.

Who was the most prompt? For the first time the two groups of pupils are agreed. Both say that the married women are more prompt than the single teachers. This preference is significant, especially since promptness is an important quality in any teacher.

Who showed the most consideration? The eighth graders have a slight preference for the married women, while the twelfth-grade pupils have no preference.

Who was the most dependable? Again both groups of pupils are agreed that the married women teachers are the more dependable, the eighth graders voting 6 to 4 and the twelfth graders 6 to 3.

Who showed the most sympathy? Here the preference of both groups is also in favor of the married women.

Who was the most progressive? Both groups are equally divided in their answers to this question. Neither group indicates a preference.

Who had the most enthusiasm? No preference is shown by either group in this connection.

Who was the most refined? Again both groups are agreed that the married women teachers are the more refined.

Who used the best judgment? The eighth graders indicate no preference, but the twelfth-grade pupils are very definitely of the opinion that the married women use the better judgment.

Who was the most thrifty? Both groups say that married women teachers are more thrifty than single women teachers. The twelfth graders are very definite in this conviction.

Who had the strongest character? The eighth graders show no preference, but the twelfth-grade pupils favor the married women teachers slightly.

Who gave you the most inspiration? Again the eighth-grade pupils have no preference, but the twelfth graders say the married women gave them more inspiration than did the single women.

Who made the classes most interesting? There is no difference in the two types of teachers in this respect.

Who had the best sense of humor? The eighth graders say the married women, but the twelfth-grade students have no preference.

Who showed the most interest in community affairs? The preference here is definitely in favor of the married women with a vote of 7 to 3 for each group of pupils.

To whom did you go for help in your studies? Both groups of pupils go to the married women teachers for help in their studies more often than they do to the single women teachers.

To whom did you go for advice? The eighth graders go to the married women for advice more frequently than they go to the single women, but the twelfth graders make no difference in this respect.

RELATION OF EDUCATION AND ECONOMICS IN AN INDUSTRIAL DEMOCRACY

ONE of the most important publications of the Educational Policies Commission which has yet appeared bears the title *Education and Economic Well-being in American Democracy*. Chief responsibility for the writing of the report was intrusted by the commission to John K. Norton. The following paragraphs quoted from the report indicate something of its scope and purpose.

The problem of financing the kind and amount of education which will maintain a high technology in a democratic, industrial society demands fundamental examination of the interrelations of education and economics. It calls for thoughtful appraisal of the contributions which education makes to productivity and general economic well-being, and judicial consideration of the economic limitations on the amount which may be wisely spent for education.

Hence this volume deals with questions such as these: What factors contribute to high productivity in an economy such as ours, and what contribution does education make to such productivity? Does the improvement and strengthening of our national economy involve an improved program of public education? What kind of educational opportunity for youth is socially desirable? What kind and amount of education will result in maximum economic well-being? To what extent are children and youths of superior ability denied educational opportunity because of lack of family finances? What effect has such denial on productivity and national income? To what extent will an educational program, right in kind and amount, tend to amortize its cost? Has the nation reached a period when it appears that basic economic limitations require restriction of the further development of free education? Or does it appear wise, from a purely economic point of view, further to extend this expression of the American ideal of equality of opportunity?

The program proposed here should be appraised from the point of view of *long-term, rather than immediate, considerations*. It should be looked upon as a series of general policies to guide future educational development, with its economic functions in mind, rather than a blueprint of specifics. The proposals made will need adaptations to state and local situations. They should be modified and perfected in the light of future experience.

This publication may be obtained from the office of the National Education Association, Washington, D.C., for fifty cents a copy.

A HELPFUL BULLETIN FOR THE EDUCATIONAL COUNSELOR

ALL WHO are interested in the individual inventory as an instrument of guidance will welcome the appearance of a recent bulletin of the United States Office of Education. The bulletin was prepared by Giles M. Ruch and David Segel and is published under the title *Minimum Essentials of the Individual Inventory in Guidance*. Chapters are devoted to the importance of the individual inventory in guidance, essentials of the individual inventory, the value for guidance of items in the individual inventory, the determination of aptitudes, the selection of tests, and a list and description of tests selected with special reference to guidance. The bulletin may be

purchased for fifteen cents from the Superintendent of Documents, Washington, D.C.

TRENDS IN THE DEVELOPMENT OF TEACHING AS A PROFESSION

A RECENT number of the Research Bulletin of the National Education Association entitled *The Status of the Teaching Profession* gives a general overview of the present status of the American teacher and also reveals certain significant trends in the development of teaching as a profession. Classroom teachers, not including administrators or supervisors, now number approximately 877,000, as compared with 200,000 seventy years ago. Three-tenths of the teachers are in the junior and senior high schools, and somewhat more than half of all teachers are working in rural schools.

Women teachers outnumber men teachers at all educational levels below the college. In 1870 women teachers in the public elementary and secondary schools constituted 61 per cent of the total; today 79 per cent of the teachers in these schools are women. At present women teachers are employed in the different types of schools in the following proportions: kindergartens and elementary schools, 88 per cent; reorganized high schools, 62 per cent (junior high schools alone, about 70 per cent); and regular and vocational high schools, 56 per cent. Single women hold a majority of teaching positions at all public-school levels. It is also a striking fact that relatively few married men are found teaching at any level: "Out of twenty teachers on each level only one elementary-school teacher, three junior high school teachers, and four senior high school teachers are married men."

The social background of the teaching population is an important factor in any educational system. In the United States the typical public-school teacher has a social background which may be described as definitely middle class.

All the studies which have been made of the background of students in teachers' colleges show that classroom teachers today are, for the most part, natives of the United States, born of native-born parents, reared in families of farmers, skilled workmen, or owners of small businesses where the median annual incomes are between \$2,000 and \$2,500. Most of the precollege life of the typical American teacher was spent in an area within a two-hundred-mile

radius of his home, and his opportunities for cultural contacts were not so great as those afforded in the homes of professional men and women. The intellectual status of the parents of most classroom teachers, however, is above the average for the whole population.

In recent years progress has been made in the educational preparation of teachers. Before 1900 the typical elementary-school teacher had less than the equivalent of a high-school education. By 1922 three out of four teachers had at least the equivalent of a four-year high-school education, but less than half had a minimum of two years of college work. At present, on the average, a teacher in the public schools has had more than three years' educational work beyond high-school graduation. In urban communities (cities with populations of 2,500 or more), the median number of years of college training which teachers have received is 4.2. Only 4 per cent have had less than two years' preparation, and 16 per cent have had five years or more. Of the teachers in rural schools, about 62 per cent have completed less than four years of college work, and 16 per cent have had less than two years beyond high-school graduation.

Teaching has not yet become a life-career, but the tendency in that direction is clear, especially in cities. The median experience of teachers in urban communities is 14.0 years and in cities of 100,000 or more, 16.0 years. In contrast, the median experience of teachers in one-teacher rural schools is only five years. The longer experience of urban teachers is accounted for, in part, by the fact that in many cities boards of education will not employ inexperienced teachers. The initial experience of most teachers has necessarily been acquired in rural schools.

The following paragraph describes the general trend in teachers' salaries.

In 1913 the average yearly salary of classroom teachers was little more than \$500. This amount was about half the average yearly earnings of all gainfully occupied persons—clear testimony as to the inferior economic position then held by members of the teaching profession. Following the World War, teachers' salaries improved considerably until, in 1930, an average of about \$1,400 was reached. The depression brought the national average down by approximately \$200. Rural teachers, especially, suffered severe salary cuts. Today again the trend is upward, the average salary of all classroom teachers being close to \$1,360 a year. On the average, urban teachers are receiving \$1,900 annually; rural teachers, \$830

THIRD ANNUAL CONFERENCE ON READING

THE third annual conference on reading at the University of Chicago, as was announced briefly in the May number of the *Elementary School Journal*, will be held in Mandel Hall June 26-29, inclusive. The central theme of the conference is "Reading and Human Development." A copy of the program follows.

Wednesday Morning, June 26

PROMOTING GROWTH THROUGH READING

GENERAL SESSION: "Relation of Reading to Individual Development and Social Progress," William S. Gray, Professor of Education, University of Chicago

"Significant Aspects of Growth in Learning Situations," Hilda Taba, Assistant Professor of Education, University of Chicago

SECTIONAL MEETINGS: "Types of Growth That May Be Stimulated through Reading"

1. Elementary School

- a) Clara Belle Baker, Director of Children's School, National College of Education, Evanston, Illinois
- b) Sally B. Marks, Professor of Elementary Education, Meredith College, Raleigh, North Carolina

2. Secondary School

- a) "Social Studies," Herbert J. Abraham, Assistant Professor of Education, University of Chicago
- b) "Science and Mathematics," H. C. Trimble, Research Associate in Education, University of Chicago
- c) "English," Chester Harris, Research Assistant in Education, University of Chicago

Wednesday Afternoon, June 26

GROWTH IN THE INTERPRETATION OF MEANING

GENERAL SESSION: "What Is Involved in the Interpretation of Meaning?"

I. A. Richards, Fellow of Magdalene College, Cambridge, England

SECTIONAL MEETINGS

1. Primary Grades

- a) "Promoting Readiness for Reading and for Growth in the Interpretation of Meaning," Madeline Semmelmeyer, Principal, Frank W. Reilly School, Chicago, Illinois
- b) "Interpretative Exercises for the Primary Grades," Ellen Walpole, Principal, Children's Studio, New York City

2. Middle Grades

- a) "Interpretative Exercises for the Middle Grades," Hugh Walpole, Research Assistant to the Committee on Communication, Harvard University
- b) "Relation of the Broader Context to Interpretation," W. Wilbur Hatfield, Head of English Department, Chicago Teachers College

3. Secondary Schools and Colleges

- "Possible Procedures in Promoting Better Interpretation of Meaning," I. A. Richards, Fellow of Magdalene College, Cambridge, England

Wednesday Evening, June 26

Round-table discussion of problems relating to the interpretation of meaning, under the direction of William S. Gray. Questions and controversial issues will be discussed from the platform by the speakers of the day and by others.

Thursday Morning, June 27

DEVELOPMENT OF ABILITY TO READ EFFECTIVELY FOR DIFFERENT
PURPOSES OR TO ATTAIN DIFFERENT OBJECTIVES

GENERAL SESSION. "The Relation of Purposes for Reading to the Reading Process and the Types of Guidance Needed," William E. Young, Director, Division of Elementary Education, New York State Department of Education

SECTIONAL MEETINGS:

1. Primary Grades

- a) "Purposes for Reading and Methods of Promoting Growth in Attaining Them," Mabel Snedaker, Supervisor of Social Studies, Elementary School; Instructor in Education, Extension Division, University of Iowa
- b) "Specific Problems Encountered and Methods of Overcoming Them," Helen Hillman Fischer, Elementary Supervisor, Public Schools, Council Bluffs, Iowa

2. Middle Grades

- a) "Purposes for Reading and Methods of Promoting Growth in Attaining Them," Prudence Cutright, Assistant Superintendent of Schools, Minneapolis, Minnesota
- b) "Types of Guidance Provided in Reading for Different Purposes in the University Elementary School," Ida B. De Pencier, Teacher, Laboratory Schools, University of Chicago

3. Secondary Schools and Colleges: "Purposes for Reading and Methods of Promoting Growth in Attaining Them"

- a) "Social Studies," J. Lloyd Trump, Teacher, University High School, University of Chicago
- b) "English," Harold A. Anderson, Instructor in Education and the Teaching of English, University of Chicago

- c) "Science," John C. Mayfield, Instructor in the Biological Sciences in the College, University of Chicago
- d) "Mathematics," Maurice L. Hartung, Assistant Professor of the Teaching of Mathematics, University of Chicago

Thursday Afternoon, June 27

DEVELOPMENT OF ABILITY TO UNDERSTAND WHAT IS
READ IN SPECIFIC CURRICULUM FIELDS

GENERAL SESSION: "Interrelations of Reading and Other Forms of Learning in Clarifying and Enriching Experiences," I. Keith Tyler, Assistant Professor of Education, Bureau of Educational Research, Ohio State University

SECTIONAL MEETINGS:

1. Primary Grades

- a) "Nature of the Difficulties Encountered in Understanding What Is Read and Methods of Overcoming Them," Prudence Cutright, Assistant Superintendent of Schools, Minneapolis, Minnesota
- b) "Development of Ability To Understand What Is Read in Specific Curriculum Fields," Mildred Miles Roberts, Supervisor, Elementary Schools, Wilmette, Illinois

2. Middle Grades

- a) "Nature of the Difficulties Encountered in Reading in the Content Fields and Methods of Overcoming Them," Mabel Snedaker, Supervisor of Social Studies, Elementary School; Instructor in Education, Extension Division, University of Iowa
- b) "Efforts To Improve Reading in the Content Fields in a School System," Alta McIntire, General Supervisor, Berwyn, Illinois

3. Secondary Schools and Colleges: "Nature of the Difficulties Encountered in Reading in the Content Fields and Methods of Overcoming Them"

- a) "Social Studies," Robert B. Weaver, Teacher, Laboratory Schools, University of Chicago
- b) "Science," Glenn O. Blough, Teacher, Laboratory Schools, University of Chicago
- c) "Mathematics," George E. Hawkins, Teacher, Laboratory Schools, University of Chicago
- d) "English," Edith E. Shepherd, Teacher, Laboratory Schools, University of Chicago

Thursday Evening, June 27

"Recent Trends and Developments in Interpretative and Choral Reading," Davis Edwards, Associate Professor of Speech, University of Chicago

Questions and controversial issues relating to interpretative oral and choral reading will be discussed by Professor Edwards, by the speakers of the day, and by others

Friday Morning, June 28

GROWTH IN INTERESTS, APPRECIATIONS, TASTES, AND
EMOTIONAL MATURITY

GENERAL SESSION: "Basic Facts and Principles Underlying Growth in Interests, Appreciations, Tastes, and Emotional Maturity," Daniel A. Prescott, Head, Division on Child Development and Teacher Personnel, American Council on Education

"The Social Influences of Reading," Douglas Waples, Professor of Researches in Reading, Graduate Library School, University of Chicago

SECTIONAL MEETINGS.

1 Elementary School

"Methods of Stimulating Desirable Reading Interests, Appreciations, and Tastes," May Hill Arbuthnot, Associate Professor of Education, Western Reserve University

2 Secondary Schools and Colleges

"The Development of Reading Interests and Critical Appreciation," Louise M. Rosenblatt, Assistant Professor of English, Brooklyn College

Friday Afternoon, June 28

DEVELOPMENT OF BASIC READING ATTITUDES
HABITS, AND SKILLS

GENERAL SESSION: "Reading as a Function of the Total Growth of the Child," Willard C. Olson, Director of Research in Child Development, University of Michigan

SECTIONAL MEETINGS.

1 Primary Grades

a) "Problems Relating to the Organization, Materials, and Methods of Basic Instruction in Reading," Genevieve Anderson, Associate Director, Department of Elementary Education, Public Schools, Des Moines, Iowa

b) "Procedures Adopted by Efficient Teachers in Promoting Growth in Reading," Maud Price, Supervising Principal of Elementary Schools, Monroe, Michigan

2 Middle Grades

a) "Procedures Adopted by Efficient Teachers in Promoting Growth in Reading," Maud Price, Supervising Principal of Elementary Schools, Monroe, Michigan

b) "Problems Relating to the Organization, Materials, and Methods of Basic Instruction in Reading," Genevieve Anderson, Associate Director, Department of Elementary Education, Public Schools, Des Moines, Iowa

3 Secondary Schools and Colleges

a) "Nature of the Reading Needs and Difficulties of Secondary School and College Students," Robert L. McCaul, Jr., Teacher, Laboratory Schools, University of Chicago

- b) "Types of Basic Instruction in Reading in Secondary Schools and Colleges," Hugh McCammon, Instructor in English, Stephens College

Friday Evening, June 28

Round-table discussion on problems relating to poor and seriously disabled readers, under the direction of William S. Gray. Questions and controversial issues will be discussed from the platform by the speakers of the day and by others.

Saturday Morning, June 29

EVALUATING GROWTH IN AND THROUGH READING

GENERAL SESSION: "Newer Techniques in Evaluating Growth," Ralph W. Tyler, Professor and Chairman of the Department of Education, University of Chicago

SECTIONAL MEETINGS:

1. Primary Grades

- a) "The Evaluation of Growth in Reading," Edward W. Dolch, Assistant Professor of Education, University of Illinois
b) "The Evaluation of Growth through Reading," Laura Oltedal, Teacher, Laboratory Schools, University of Chicago

2. Middle Grades

- a) "The Evaluation of Growth through Reading," Mildred C. Letton, Teacher, Laboratory Schools, University of Chicago
b) "The Evaluation of Growth in Reading," Edward W. Dolch, Assistant Professor of Education, University of Illinois

3. Secondary Schools and Colleges

- a) "The Evaluation of Growth in Reading," Wilfred Eberhart, Assistant Professor of Education, Ohio State University
b) "The Evaluation of Growth through Reading," Paul B. Diederich, Assistant Professor of Education, University of Chicago
Harold B. Dunkel, Examiner, Board of Examinations, University of Chicago

Saturday Afternoon, June 29

SECTIONAL MEETINGS: "The Function and Activities of Libraries in Promoting Growth in and through Reading"

1. Elementary School

Josephine Dillon, Librarian, Mount Auburn School, Cleveland, Ohio

2. Secondary Schools and Colleges

Frances E. Henne, Librarian, University High School, University of Chicago

GENERAL SESSION: "Summary of the Conference"

Grace E. Storm, for the primary grades

William E. Young, for the middle grades

Hugh McCammon, for the secondary schools and colleges

William S. Gray, for the conference as a whole

WHO'S WHO FOR JUNE

The authors of articles in the current issue EMMETT A. BETTS, research professor at Pennsylvania State College, State College, Pennsylvania. DEWEY A. GANZEL, research fellow at New York University. ROBERT L. THORNDIKE, assistant professor of education at Teachers College, Columbia University. FLORENCE HENRY, teacher of English in Grade VIII at Hamilton School, Highland Park, New Jersey. DOROTHY LEGGITT, teacher of social science and remedial penmanship at Wydown School, Clayton, Missouri. JAMES F. ABEL, chief of the Division of Comparative Education of the United States Office of Education.

The writers of reviews in the current issue JOHN E. ANDERSON, director of the Institute of Child Welfare at the University of Minnesota. J. WAYNE WRIGHTSTONE, assistant director of the Division of Tests and Measurements, Bureau of Reference, Research, and Statistics of the New York City Board of Education. J. M. HUGHES, professor of education at Northwestern University. CLYDE B. MOORE, professor of rural education at Cornell University. ADA R. POLKINGHORNE, teacher in the Laboratory Schools at the University of Chicago. R. L. MORTON, professor of education at Ohio University, Athens, Ohio. RUTH R. WATSON, teacher in the Laboratory Schools at the University of Chicago.

READING PROBLEMS AT THE INTERMEDIATE- GRADE LEVEL¹

EMMETT A. BETTS

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THIS article reports one section of the data collected on seventy-eight fifth-grade pupils in a public school in State College, Pennsylvania, with a view to studying both the clusters of difficulties and the capacities for compensation. Since reading is primarily a thinking process, special emphasis was put on this phase of the problem. Data were secured also on certain other factors which appeared to be fruitful for investigation. Some of the tests used in this study are being selected for investigation of a larger population.

PURPOSES AND CONDITIONS OF THE STUDY

The chief purposes of this study were: (1) to study the interrelations of certain reading tests designed for fifth-grade pupils; (2) to secure both objective and subjective data on levels of achievement in reading; (3) to study the incidence of certain common reading difficulties at the fifth-grade level; (4) to compare ability in reading and spelling at the fifth-grade level; (5) to study the incidence of certain marginal factors, such as personality and certain types of hearing and seeing difficulties; (6) to study the binocular and the monocular reading habits of fifth-grade children by means of the ophthalmograph; and (7) to study the range of individual differences in one fifth grade.

This study was initiated at the fifth-grade level chiefly because of the number of instruments available at that level for the appraisal of the situations in question. Some of the conditions of the study are listed as follows: (1) Complete data were secured on only seventy-eight fifth-grade pupils: forty-one girls and thirty-seven

¹ This report was prepared with the assistance of the following members of the staff of the reading clinic of the Pennsylvania State College. Arthur W. Ayres, statistician, and Lois Bird, clinician.

boys. (2) The median chronological age was ten years and eight months, with a range from nine years and eight months to fourteen years and five months. (3) The average mental age was twelve years and five months, with a range from nine years and four months to fifteen years and five months. (4) The average intelligence quotient, determined by means of the Stanford Revision of the Binet-Simon Scale, was 114.9, with a range from 74 to 147. In terms of the Bernreuter-Carr interpretation¹ of the new Binet test, 19.23 per cent of the pupils were very superior; 37.18 per cent, superior; 41.03 per cent, normal; and 2.56 per cent, dull. (5) The subjective reading inventory was given individually. No check was made on the reliability of this inventory, which was taken by an experienced graduate student who is a member of the reading clinic staff. (6) The tests were administered over a period extending from March 15 to June 1, 1938.

RESULTS

A number of tests of each type were administered, and the correlations between the scores obtained are shown in Table 1.

Intelligence.—Four intelligence tests were administered: the New Stanford Revision of the Binet-Simon Scale, the Durrell-Sullivan Reading Capacity Test, the Henmon-Nelson Test of Mental Ability (Form A), and the California Test of Mental Maturity. Table 1 shows that the Durrell-Sullivan Reading Capacity Test had a higher correlation with the Binet test than with either of the other tests used. The correlation between the Durrell-Sullivan Reading Capacity Test and the Durrell-Sullivan Reading Achievement Test was $.775 \pm .0764$.

Reading achievement.—Table 1 shows that the correlations of the five reading-achievement tests ranged from $.723 \pm .0367$ to $.865 \pm .0191$. The chief weakness of some of these tests was the lack of discriminative power. Table 2 gives the highest score and the lowest score made on each test. The low grade-placement scores on the tests ranged from 2.6 to 4.1; the high, from 8.4 to 12.0.

Table 1 shows that the correlations between the vocabulary tests ranged from $.543 \pm .0542$ to $.871 \pm .0190$.

¹ Robert G. Bernreuter and Edward J. Carr, "The Interpretation of IQ's on the L-M Stanford-Binet," *Journal of Educational Psychology*, XXIX (April, 1938), 312-14.

TABLE 1

CORRELATIONS BETWEEN SCORES ON VARIOUS TESTS OF INTELLIGENCE
READING ACHIEVEMENT, VOCABULARY, AND RATE OF READING
FOR SEVENTY-EIGHT FIFTH-GRADE PUPILS

Measures Correlated	Correlation
<i>Tests of intelligence:</i>	
Durrell-Sullivan Reading Capacity Test and:	
California Test of Mental Maturity . . . . .	.687 ± .0405
New Stanford Revision of Binet-Simon Scale . . . . .	.749 ± .0336
Henmon-Nelson Test of Mental Ability . . . . .	.682 ± .0259
Henmon-Nelson Test of Mental Ability and:	
New Stanford Revision of Binet-Simon Scale . . . . .	.712 ± .0374
California Test of Mental Maturity . . . . .	.755 ± .0328
California Test of Mental Maturity and:	
New Stanford Revision of Binet-Simon Scale . . . . .	.685 ± .0412
<i>Tests of reading achievement:</i>	
Sangren-Woody Reading Test, Form A, and:	
Progressive Reading Tests . . . . .	.783 ± .0297
Iowa Silent Reading Tests . . . . .	.723 ± .0367
Durrell-Sullivan Reading Achievement Test . . . . .	.805 ± .0275
Stanford Achievement Test, Reading . . . . .	.760 ± .0328
Stanford Achievement Test, Reading, and:	
Progressive Reading Tests . . . . .	.865 ± .0191
Iowa Silent Reading Tests . . . . .	.846 ± .0221
Progressive Reading Tests and:	
Iowa Silent Reading Tests . . . . .	.766 ± .0313
<i>Tests of vocabulary:</i>	
Vocabulary Test of Gates Reading Survey for Grades 3 to 10, and:	
Durrell-Sullivan Reading Achievement Test, Word Meaning . . . . .	.594 ± .0496
Holley Sentence Vocabulary Scale . . . . .	.543 ± .0542
Pressey Diagnostic Reading Tests in Vocabulary . . . . .	.838 ± .0229
Durrell-Sullivan Reading Achievement Test, Word Meaning, and:	
Holley Sentence Vocabulary Scale . . . . .	.871 ± .0190
Pressey Diagnostic Reading Tests in Vocabulary . . . . .	.729 ± .0359

TABLE 1—*Continued*

Measures Correlated	Correlation
<i>Tests of rate of reading:</i>	
Ophthalmograph V-A card and:	
Sangren-Woody Reading Test, Form A . . . . .	.569 ± .0519
Gates Silent Reading Tests, Types A, B, C, and D. . . . .	.719 ± .0367
Pressey Diagnostic Reading Tests, Speed Test, and:	
Sangren-Woody Reading Test, Form A . . . . .	.630 ± .0466
Iowa Silent Reading Tests. . . . .	.586 ± .0578

On the subjective silent-reading examination four pupils were placed at the preprimer and first-reader levels. On the subjective oral-reading test six pupils were placed at the primer and first-reader levels. In the case of the thirty pupils who made the highest average scores on the Gates Silent Reading Tests, Types A, B, C, and D, there was agreement between the subjective oral findings and the Gates tests on twenty-two out of the thirty cases. The findings on the twenty-nine low achievers identified by the Gates Silent Reading Tests and by the subjective oral test showed an agreement in twenty-two cases.

Rate of reading.—The average rate of reading on four fifth-grade ophthalmograph cards was 247.3 (standard deviation of 92.8) words per minute, with a range from 48 to 649. Correlations between the tests of reading are shown in Table 1. The Gates Silent Reading Tests showed a rather high correlation ($.719 \pm .0367$) with the ophthalmograph V-A card.

Both binocular and monocular reading rates were taken on the ophthalmograph cards. Cards V-A and V-D were used to take the binocular reading graphs; card V-B, for the left-eye reading graph, and card V-C, for the right-eye reading graph. This phase of the study was initiated to determine the incidence in the general population of certain types of cases referred to the reading clinic. For example, last year a pupil was encountered who consistently read approximately 267 words a minute with both eyes, 471 words a minute with the left eye, and 122 words with the right eye. This individual had failed all except the fusion tests of the Betts Visual Sensation

and Perception Tests. For the seventy-eight pupils examined for this study, no such startling data were secured.

Reading difficulties.—The summary of reading difficulties was taken from the subjective tests of oral and silent reading. The oral-reading situation violated recommended teaching practices because no silent-reading preparation was provided. In general every pupil

TABLE 2
SUMMARY OF HIGH AND LOW GRADE SCORES
ON READING TESTS

Test	Low Score	High Score
Gates Silent Reading Tests:		
Type A, Reading To Appreciate the General Significance of a Paragraph	3 1	11 5
Type B, Reading To Predict the Outcome of Given Events	3 1	11 5
Type C, Reading To Understand Precise Directions	3 0	11 5
Type D, Reading To Note Details	3 0	11 5
Average	3.2	10 9
Gates Reading Survey for Grades 3 to 10.		
Level of Comprehension	3 6	12 0
Vocabulary	3 4	10 9
Speed and Accuracy	2 6	10 0
Stanford Achievement Test, total reading grade	3.6	10 0+
Durrell-Sullivan Reading Capacity Test, total score	3 4	8 7
Durrell-Sullivan Reading Achievement Test, total score	3 4	8 4
Progressive Reading Tests, total score	4 1	8 7
Sangren-Woody Reading Test, total score	3-9	9-1
Iowa Silent Reading Tests, total comprehension score	3-10	10-3

evidenced some type of word-recognition difficulty on the fifth-grade material used. Only one pupil evidenced a tendency to reverse letters and words. Eighteen per cent exhibited partial confusions, for example, *tired* for *tried*. Table 3 is a summary of the responses in the silent-reading situation; Table 4, in the oral-reading situation.

Reading preferences.—In response to the question, "What kind of books do you like best?" 47 per cent of the pupils indicated mystery books; 38 per cent, books of adventure and excitement; 9 per cent, geography and history; 8 per cent, books about the sea and boats; 6 per cent, fairy tales. Sixty-eight per cent of the girls preferred mys-

tery books as contrasted with 24 per cent of the boys. Only one boy and one girl expressed a preference for poetry.

Spelling.—The correlation between the Durrell-Sullivan Reading Achievement Test and a fifty-word sampling of the second-semester fifth-grade spelling words was $.569 \pm .0519$. The thirty high achievers on the Durrell-Sullivan Reading Achievement Test made an average score of 89.0 per cent on the spelling test; the thirty low

TABLE 3
SUMMARY OF DIFFICULTIES DETECTED ON SUBJECTIVE
SILENT-READING EXAMINATION

Response	Percentage of Pupils	Response	Percentage of Pupils
1. Tension movements:		3. Posture (<i>continued</i>):	
a) Hands	18	c) Book too close . . .	8
b) Body	12	d) Book at an angle . . .	6
c) Legs and feet	9	4. Eye strain:	
d) Placing fingers to mouth	8	a) Frowning	12
e) Biting finger nails . . .	6	b) Squinting	8
f) Lips and mouth	5	c) Excessive blinking . . .	5
g) Twitching of cheek muscles	3	d) Shading eyes	4
2. Difficulty in locating information	33	e) Rubbing eyes	26
3. Posture.		5. Silent lip-movement . . .	26
a) Book too far away . . .	9	6. Lateral head-movement	17
b) Poor posture	9	7. Reading tenseness or fear	12
		8. Wandering attention . . .	12
		9. Finger-pointing	5
		10. Whispering	5
		11. Low vocal utterance	5

achievers, 68.4 per cent. The correlation between the averaged scores on the Gates Silent Reading Tests and the scores on the second-semester fifth-grade spelling words was $.464 \pm .0603$.

Personality.—The Brown Personality Inventory for Children was administered on two successive days. Neither the teachers nor the pupils knew of the plan for administering the test a second time. The pupils were requested to register their names on the inventories. Scores on this test represent atypical responses. The correlation between the scores on the first testing and the retesting was $.919 \pm .0122$. Table 5 shows that the average score was 17.20, which Brown indicates as average adjustment. The average score for the good readers was 16.93; for the poor readers, 20.06. There was no sta-

TABLE 4
SUMMARY OF DIFFICULTIES DETECTED ON SUBJECTIVE
ORAL-READING EXAMINATION

Response	Percentage of Pupils	Response	Percentage of Pupils
1. Word perception:		3. Emotional reactions:	
a) Substitutes words. . . .	73	a) Lack of confidence. . . .	23
b) Has difficulty with suffixes	65	b) Indifference.	14
c) Omits letters or syllables	54	c) Tension or fear.	13
d) Has difficulty with final consonants.	49	d) Shyness, reticence, or timidity.	13
e) Inserts letters or syllables.	45	e) Aggressiveness	9
f) Uses faulty vowels. . . .	41	f) Overconfidence	9
g) Omits words.	40	g) Sullenness.	1
h) Inserts words	40	h) Negativism.	
i) Guesses.	35	4. Tension movements:	
j) Has difficulty with consonants in body of word	31	a) Hands.	23
k) Has difficulty with prefixes	29	b) Legs and feet.	12
l) Repents.	28	c) Body	9
m) Has difficulty with syllabication.	26	d) Mouth	5
n) Has difficulty with initial consonants	24	5. Word-calling:	
o) Looks at first letter only	22	a) Inadequate phrasing. . .	21
p) Adds letters.	22	b) Lack of emphasis on meaning.	18
q) Makes many errors on short common words . .	22	6. Posture:	
r) Transposes words . . .	21	a) Head tilt	14
s) Makes partial reversals	18	b) Book too far away. . . .	8
t) Has difficulty with consonant blends	13	c) Book at an angle. . . .	6
u) Misplaces accent. . . .	10	d) Book too close.	5
v) Refuses to read and is aided with a difficult portion	10	7. Faulty enunciation . . .	33
w) Adds syllables	8	8. Eye strain:	
x) Spells out word	3	a) Frowning.	14
y) Reverses letters. . . .	1	b) Squinting.	6
z) Reverses words. . . .	1	c) Excessive blinking . . .	5
aa) Loses place.	1	d) Shading eyes	4
bb) Skips lines.	1	e) Rubbing eyes	
2. Voice control:		9. Rate:	
a) Irregular breathing. . .	23	a) Too slow.	17
b) Monotonous.	19	b) Too fast	10
c) High pitch	18	10. Punctuation, ignores	25
d) Sing-song	15	11. Speech difficulty:	
e) Lack of rhythm	15	a) Blocking	7
f) Too soft.	9	b) Lipping	5
g) Too loud	6	12. Finger pointing:	
		a) Occasionally	6
		b) Continuous.	1
		c) Frequently.	1

tistically significant difference in the social-adjustment scores made by the thirty pupils who scored highest and the thirty who scored lowest on the Durrell-Sullivan Reading Achievement Test.

Hearing impairments.—Using a 6A Western Electric audiometer, Frank Harvey, the district audiphone specialist, found twelve cases in need of referral. Both bone- and air-conduction findings were taken at frequencies from 128 to 9,747. Six of these cases were

TABLE 5
DISTRIBUTION, ACCORDING TO SCORE ON BROWN PERSONALITY
INVENTORY, OF TOTAL GROUP OF SEVENTY-EIGHT FIFTH-
GRADE PUPILS AND OF BEST AND POOREST READERS

DEGREE OF ADJUSTMENT	SCORE	NUMBER OF PUPILS MAKING SCORE		
		Total Group	Pupils above Average in Reading Ability	Pupils below Average in Reading Ability
Very poor.	26+	18	11	5
Poor	19-25	11	4	4
Average	15-18	14	4	8
Good.	9-14	17	6	7
Excellent.	0-8	18	5	6
Total. . . . .	.....	78	30	30
Average of indi- vidual scores	.....	17 20	16 93	20 06

among the thirty readers below average on the Durrell-Sullivan Reading Achievement Test, and three were among those above average. In the upper 20 per cent of the group there were no hearing impairments. With one exception the patterns of hearing found on six audiograms of the below-normal readers were similar, but they varied significantly from the hearing patterns on the three audiograms for the good readers with hearing loss. Each of the three above-average readers with hearing impairments experienced the greatest loss at a frequency of 512, while the below-average readers with hearing difficulties had losses at higher frequencies. When retardation was determined by the Durrell-Sullivan Reading Capacity and Achievement Tests, five of the retarded readers and four of the normal readers had hearing impairments.

Visual difficulties.—Each of the seventy-eight pupils was tested and retested by means of the Betts Visual Sensation and Perception Tests. This examination was made by an experienced member of the reading clinic staff. The correlation between the first and the second testings with the lateral-imbalance slide was $.864 \pm .0189$ for sixteen inches and $.871 \pm .0182$ for optical infinity. Similar data on the consistency of these test results are reported in another publication.^{*}

Among the thirty highest achievers on the Durrell-Sullivan Reading Achievement Test, six failed two or more tests of the Betts battery; one failed the lateral-imbalance test; and one had only monocular vision. Among the thirty low achievers, fourteen failed two or more tests. Four of these fourteen cases were suppressing. These data do not necessarily conflict with previous reports because some of the factors brought under consideration here have not been reported.

CONCLUSIONS

Within the limitations of this study, the following conclusions appear to be valid:

1. The results from a given test for measuring rate of comprehension in reading are not highly comparable with the results secured from another test. It was interesting to note that a correlation of $.719 \pm .0367$ was found between one fifty-word ophthalmograph reading card and combined scores on the Gates Silent Reading Tests.
2. The wide range of reading rates within a classroom should challenge the best efforts of the teacher to differentiate reading activities.
3. The wide range of reading levels within a given grade presents a critical situation for those who insist on requiring every pupil in that grade to read from the same basal readers.
4. Some of the reading tests used did not discriminate among abilities of the high achievers in this group. For example, 26 per cent of the pupils in this study reached the upper limit of one of the vocabulary tests.

^{*} Emmett A. Betts, *Data on Visual Sensation and Perception Tests*, Parts I and II Meadville, Pennsylvania. Keystone View Co., 1939.

5. None of the reading tests provided an accurate index to the levels at which reading instruction should be initiated for the low achievers. For example, 11 per cent of the pupils in this fifth grade experienced difficulty in typical third-grade reading activities, but only one of the standardized tests used placed these pupils below third grade. However, these tests did identify the low achievers needing further analysis of their reading difficulties.

6. The high incidence of undesirable responses in certain reading situations indicates the need for systematic instruction in reading at this level.

7. Special attention should be given to word perception at the fifth-grade level.

8. Retardation in terms of capacity exists at all levels of achievement even though certain pupils may appear to be accelerated in terms of grade performance.

9. There appeared to be marked differences in certain types of reading preferences.

10. Correlations between scores on reading tests and scores on tests of spelling ability were not particularly high. However, the average score in spelling made by the best readers was higher than that made by the poorest readers.

11. It appears that the Brown Personality Inventory for children is a reliable instrument for use at the fifth-grade level.

12. There was a greater incidence of hearing impairments among the low achievers in reading than among the high achievers. This finding may indicate a possible causal relation, or it may reveal merely another difficulty for which the non-achievers must compensate.

13. There was a greater incidence of binocular difficulties among the low achievers than among the high achievers.

HOW MAY TEACHER-TEACHER RELATIONSHIPS BE IMPROVED?

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*

WHAT are desirable teacher-teacher relationships as they function from day to day in and out of school? What criteria may be established as a measure of desirable conduct? These and related questions disturb many teachers and school administrators.

With the hope of determining what elementary-school teachers consider important factors in obtaining desirable relations between teachers, the writer made inquiry of 212 teachers representing 165 schools. One hundred and forty-seven questionnaires were returned. The items which the teachers consider most important are here grouped into four categories: (1) respect for personality, (2) interchange of ideas and experiences, (3) co-operation, and (4) criticism.

Two questions were asked of each teacher: (1) "During your experience as a teacher, what have been some of the undesirable teacher-teacher relationships which you have experienced?" and (2) "What criteria or principles would you suggest for the improvement of teacher-teacher relationships?"

For the purpose of obtaining frankness it was stated that the questionnaires were to be returned unsigned. In the opinion of the writer, the unusual list of items suggested for the improvement of teacher-teacher relationships shows that elementary-school teachers are giving serious consideration to problems in education and that they are able to offer valuable suggestions about how these problems may be solved in the light of a newly developed philosophy of society and education. The following criteria were listed as most important. To make the meaning of the statements clear to the reader, the writer has, in a few instances, "edited" the statement, being careful not to misinterpret the meaning intended by the teachers who included the item in their lists of suggested criteria.

RESPECT FOR PERSONALITY

1. Every teacher should be thoughtful of the feelings of other teachers.
2. The relations between teachers should be such that each of them does nothing to impair his own self-respect, since self-respect is essential to growth.
3. It should be remembered that friendly rivalry is stimulating but that rivalry leading to partisanship is degrading.
4. "All things whatsoever ye would that men should do unto you, do ye even so to them" is still found to be a usable theory by those teachers who have a well-developed consideration for the personality of others and a due respect for the values of group co-operation.
5. Every teacher should be regarded by every other teacher as a fellow-craftsman and as entitled to all the rights, courtesies, and emoluments that are usually obtained in other professions.
6. The relation of one teacher to another or to the other teachers in his school or in the whole profession should be that of any intelligent self-respecting human being to the other members of society whose personalities he respects and with whom he is willing to work unselfishly and understandingly.

INTERCHANGE OF IDEAS AND EXPERIENCES

1. Teachers working in the same field should hold informal conferences, at which there should be thorough exchange of experiences.
2. A teacher should observe other teachers at work and should confer with them concerning their problems and the attempted solutions of the problems.
3. Every teacher should be willing to serve other teachers in any way possible by making available to them the results of his own experiences, both when he has succeeded and when he has failed, and by welcoming observation and discussion of his work.
4. Teachers should report experiments and hold educational clinics at which members of the staff demonstrate promising methods to the other members of the staff.
5. Teachers may help others greatly by giving of their own peculiar abilities and resources to those who may be lacking in these fields, since teachers, as do all adults, differ among themselves, one being scholarly or possessing some unique artistic ability or type of native endowment which another may not have.
6. Classroom teachers who are making unique contributions to the progress of the profession and who are repeatedly told by their colleagues that they should make their experiences available to others should put into written form any of their experiences and experiments which may prove helpful to other teachers.
7. All teachers should take an active part in teachers' organizations and should be ready to discuss their own problems or to offer suggestions for meeting and solving the problems of others.

CO-OPERATION

1. A teacher should keep in mind the whole educational plan, should feel conscious of the constantly co-operative part that he is expected to play in it, should counteract the tendency toward sensitive individualism and turn the tendency toward loyal team work.

2. A teacher should realize that he is just one of the several who must work together to make it possible for the entire school to function as a unified institution, that he cannot be a rank individualist who feels that he has a right to do exactly as he pleases regardless of the point of view of the other teachers in the building.

3. Teachers should work together as a team and make the development of common ideals, social qualities, and habits of work a continuous growth.

4. Plans and contributions of other teachers should be respected, and co-operation of every possible kind should be stimulated.

5. Jealousies and distrust among teachers should be avoided and mutual confidence built up.

6. Every teacher should develop a sense of co-operation toward all others in the group and an interest in the work of the others.

7. A teacher should not interfere between another teacher and a pupil in matters such as discipline or marking

8. Closer co-operation of work and interest can be obtained if a teacher knows what is going on in the grade below his own and follows with interest the progress of the pupils after they have left him.

9. Teachers should at all times be ready to assist one another by giving information, counsel, and advice and by such services and acts as teachers can perform without detriment to themselves or to their work.

10. Adequate help and encouragement should be given a beginning teacher. Courtesy and interest should be shown a teacher new to a system, especially during the critical period of the first few weeks.

11. Teachers inexperienced or new to a staff should feel free to report difficulties, should be willing to ask advice from other teachers in the school, and should aim to modify their ideas and methods to fit the general policies of the school.

12. A teacher should combine his effort with the efforts of many others by co-operating in maintaining order, in managing playgrounds, in making daily programs, and even in giving instruction

13. Problems which arise in a school should be discussed at a meeting of all teachers affected, and a method of procedure for correcting each problem should be worked out while the group is together.

14. Teachers should aim to understand one another's viewpoint, to keep from trying to impose their own ideas and methods on others, and to reach sympathetic solution of differences.

15. Team work results if teachers keep before them the same general educative goals, direct their work toward these goals, have a community of interests and problems, and feel mutual respect.

CRITICISM

1. Since they are regarded as examples for pupils, teachers should always so conduct themselves that no just reproach may be brought against them by anyone, including their co-workers.

2. Confucius said, "A man of noble mind seeks to perfect the good in others and not the evil." Hence a teacher especially should seek to find the good, actual or possible, in his co-workers and should concentrate on promoting the growth of that good and thereby develop for himself a happy personality and improve the personal relationships within the whole group.

3. Teachers should help one another by giving tactful suggestions for improvement and should encourage one another by use of constructive criticism which subordinates defects and concentrates on the discovery and the promotion of promising strengths.

4. Participation in gossip which may lead to criticism of fellow-workers should be avoided. The innocent become involved with the guilty.

5. One teacher should not permit a pupil to criticize or talk about another teacher to him. If he does hear such talk, he should direct it away from remarks of an adverse type.

6. Adverse criticism of one teacher by another should not be repeated except to the one interested or to his superior with full expectation that opportunity for explanation will be afforded.

7. Adverse comments and insinuations in regard to the work of a predecessor or of the teacher of a previous grade are to be condemned.

8. Work of other teachers should not be disparaged if they have made a conscientious effort.

9. Teachers should aim to keep from becoming self-centered to the extent that in a spirit of jealousy they belittle the results of their co-workers who have acquired prominence.

It is the opinion of the writer that a study of the foregoing criteria will prove to be beneficial, not only to school administrators, but to teachers as well, in promoting democratic school practices and in developing those relationships essential to the successful administration of a school.

DIFFERENCES IN READING INTERESTS RELATED TO DIFFERENCES IN SEX AND INTELLIGENCE LEVEL

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*

PURPOSE OF THE INVESTIGATION

THE effort in this investigation has been to compare the reading interests of slow- and fast-learning children in such a way that the pattern of interest would be obscured as little as possible by differences in reading experience and ability. At the same time a comparison has been made of the interests of boys and girls. A comparison of the interests of fast and slow learners as revealed by specific past reading experience may produce results that are based as much on what the children have been able to read as on what they have wanted to read. Some topics may fail to appear in the lists for the slow-learning child, not because they are not intrinsically interesting to him, but because he has encountered nothing readable on those topics. The topic of aviation might be a case in point. Boys from ten to fifteen years old and of all levels of ability are interested in aviation. They seem to be interested not only in adventure stories about aviators but also in the realistic and more technical side of aviation. Even if it is true that slow-learning pre-adolescent boys are interested in reading about the technical and the vocational aspects of aviation, this interest will probably not appear in their reported reading because they have found no material on this topic which is readable for them. There may be a number of other areas in which past reading experience, especially for slow-learning children, is an inadequate indicator of potential reading interest.

In an attempt to escape from the difficulty suggested and to present to each child a uniform set of situations for his response, a

reading-interest questionnaire was prepared which was made up of *annotated fictitious titles*. The area of children's reading was mapped out, and titles were designed to sample the various types of topics on which children read. Fictitious titles were used in order to avoid a situation in which part of the children are reacting on the basis of actual experience with a book, with all the factors of style, difficulty, format, etc., involved, while other children are reacting merely to the general topic set by the title. Annotations were added to define the stimulating situation somewhat more completely and precisely. The following are samples of the items in the questionnaire.

Yes No ? *Lonesome Laddy Finds a Friend.*
How a stray dog found a new master and showed his true love.

Yes No ? *Pilot Peters on Patrol.*
The adventures of an airplane scout. What was the mystery plane that roared by in the dawn?

Yes No ? *Pieces of Eight.*
In a trunk in the attic Jim and Ted found an old, old map, which mysteriously disappeared. Who stole the map, and why?

Yes No ? *Is There a Doctor in the House?*
The doctor's everyday life. His exciting battle against accidents and sickness. His disappointments and rewards.

The questionnaire is presented to children with instructions to encircle "Yes" if they would like to read the story, "No" if they would *not* like to read the story, and "?" if they cannot make up their minds. The analysis which follows is based on the percentage of children selecting each title. In this percentage the doubtful answers have been treated as one-half of a choice.

The instructions for administering the questionnaire emphasize that the child is to mark the titles which he would *really like to read*. It must be admitted, however, that the behavior of respond-

ing to a questionnaire is several steps removed from the behavior of actually reading. The validity of questionnaire responses on some items may be suspect, especially for items where the child feels definite social pressure to respond in a positive way. Included in the questionnaire are the following titles which are designed to serve as an indication of this type of invalidity: *Famous Sermons by Famous Preachers*, *The Good Life*, *History of the Lutheran Church*, *Brush Your Teeth*, *The Dying Words of the Saints*, and *History of the Dutch Republic*. It seems reasonable to suppose that a child who responds by selecting all or most of these titles is rather unrealistic in his report—whatever the source of this unrealism may be. The reality of this problem is suggested by the finding that, on the average, these titles were chosen by 35 per cent of the fast-learning and 46 per cent of the slow-learning group.

PROCEDURE

This reading-interest questionnaire was administered in the spring of 1939 to 101 rapid-learning and 107 slow-learning children in the rapid- and slow-learner classes in Grades VI, VII, and VIII in a small suburban town in New Jersey. A comparison of the two groups according to sex, intelligence quotient, reading age, and chronological age is given in Table 1. One school, attended by 175 of these pupils, draws its enrolment from homes in the upper socio-economic levels. The fathers of these pupils are employed in the professional, semiprofessional, and business fields. The other school, attended by thirty-three of the subjects, is in a section with a large foreign population of the laboring classes.

The directions on the front page of the questionnaire were read to the rapid learners, and these pupils filled in the answers with no further help. The directions and the questionnaire items were read aloud by the examiner to the slow learners in small groups. The pupils understood that the results of the questionnaire were not intended for school purposes, and frankness in answering was encouraged. Most of the children knew the examiner, who had formerly taught in these schools.

The primary purpose of this investigation was to compare the interests of the fast- and slow-learning children. The frequency of

choice was determined for each title for these two groups. The differences between these frequencies were analyzed by means of chi-square, for the purpose of determining which differences were too large to be reasonably attributed to chance. Two levels of significance (.05 and .01) were used. Items for which the value of chi-

TABLE 1

COMPARISON OF RAPID-LEARNING AND SLOW-LEARNING GROUPS AS TO SEX, INTELLIGENCE QUOTIENT, READING AGE, AND CHRONOLOGICAL AGE

Group	Number of Boys	Number of Girls	Both	Mean Intelligence Quotient*	Mean Reading Age (in Years and Months)†	Mean Chronological Age (in Years and Months)‡
Grade VI:						
Rapid learners	7	22	29	121	13-3	11-6
Slow learners	17	12	29	89	10-7	12-6
Grade VII:						
Rapid learners	23	13	36	132	15-8	12-7
Slow learners	20	14	34	88	11-5	13-6
Grade VIII:						
Rapid learners	22	14	36	131	16-2§	13-3
Slow learners	24	20	44	88	12-3§	14-7
Grades VI-VIII:						
Rapid learners	52	49	101	128	15-0	12-5
Slow learners	61	46	107	88	11-5	13-6

* Intelligence-test records in Grade VI were obtained from the National Intelligence Test and in Grades VII and VIII from the Terman Group Test of Mental Ability.

† The reading age is taken from the total reading score on the Stanford Achievement Tests given in May, 1938. The scores of seven fast learners and twelve slow learners were not available and are not included in these results.

‡ Chronological age as of March 20, 1939, when the questionnaire was administered.

§ The reading age in Grade VIII is an extrapolated score.

square yielded a probability between these limits were considered to show a difference *probably* due to a factor other than chance, while items for which chi-square corresponded to a probability less than .01 were considered to show a difference *definitely* attributable to some real underlying factor. As a subsidiary result, percentages of choice and values of chi-square were determined for boys and girls, and their interest patterns were compared.

CHOICES OF FICTION

A comparison of the interests of the rapid- and slow-learning groups and of boys and girls may be obtained from the results for each title. The titles have been grouped into general classes according to both title and annotation. The successive columns of Table 2 present the data for fiction titles. The probability of obtaining by chance a value of chi-square as large as 6.635 is one in a hundred, and the probability of obtaining by chance a value as large as 3.841 is one in twenty. The results for each category are briefly discussed below.

As far as intelligence level is concerned, all the differences for realistic animal stories are small and insignificant, with the possible exception of "Little Tony's Pony," which is rather a childish item. Sex differences are small for four of the six items. The two items with a suggestion of violence have significantly more appeal for boys. The general level of appeal of these items ranges from moderately low (for the more childish items) to high.

Neither the sex nor the ability differences are large for the titles of talking animal stories. All these percentages are rather low, and there is a suggestion that the bright children reject these childish titles more completely than do the slow-learning group.

Among the titles of mild adventures of children, "Pieces of Eight" has a high appeal, especially for the bright children. The theme in this case is a secret map. "Polly and Peter on the Prairie" makes reliably more appeal to the slow children, but evidence not reported here indicates that this title appeals to bright children at an earlier age. The reliable differences between boys and girls on three of these items indicate that the mild adventure story with a child hero is likely to be feminine in its appeal, especially if it revolves wholly or partly around feminine characters.

The ability differences are small for stories of child life in other lands. When the story centers in a boy, the sex difference is small; but, when it centers in a girl, the difference is very large. The appeal is high only in the case of a story about girls read by girls.

Titles of stories of magic and fantasy have little appeal for this age group. The differences between the ability groups are small, but the rejection by the boys is much more emphatic.

TABLE 2

PERCENTAGE OF PUPILS, CLASSIFIED ACCORDING TO INTELLIGENCE AND SEX, WHO INDICATE DESIRE TO READ TITLES SHOWN AND RELIABILITY OF DIFFERENCE (FICTION)

BOOK TITLE	INTELLIGENCE GROUP			SEX GROUP		
	Percent- age of Fast- learning	Percent- age of Slow- learning	Chi- square	Percent- age of Boys	Percent- age of Girls	Chi- square
Realistic animal stories:						
Lonesome Laddy Finds a Friend.....	86	78	2.24	78	86	2.14
Woof-woof the Terrier ..	45	53	1.42	46	52	.77
The Wolf Pack Hunts Again.....	69	62	1.16	76	53	12.06
An Elephant Never For-gets.....	62	66	.36	61	67	.66
Jungle Echoes.....	63	69	.92	79	51	17.68
Little Tony's Pony ...	43	58	4.60	48	54	.61
Talking animal stories:						
Buster Bear's Birthday..	25	36	3.09	25	37	3.86
Bob the Beaver Builds a Dam.....	30	37	1.21	37	29	1.22
Rather mild adventures of children:						
The Lonesome Papoose...	40	42	.13	22	64	37.68
When the Circus Came to Town.....	49	52	.30	46	55	1.60
Pieces of Eight.....	90	77	5.78	85	82	.32
Cowboy Billie.....	48	48	...	49	46	.16
Dora and Donald.....	50	59	1.47	36	77	34.28
Polly and Peter on the Prairie.....	47	70	12.29	51	68	6.56
Child life in other lands:						
Marie, the Little French Girl.....	41	47	.68	19	72	58.18
Jan, the Dutch Bridge Boy.....	41	42	.02	39	45	.73
Greta Skates for Sweden	50	52	.12	26	81	62.15
Magic and fantasy:						
The Magic Wishing-Ring	32	41	1.61	21	55	26.44
The Magic Wand.....	27	30	.26	16	43	18.83
Doll Island.....	28	21	1.26	6	47	45.77
Love and romance.						
Mary Mitchell's Sweet-heart.....	45	47	.06	25	71	42.66
Cupid Takes a Holiday	46	56	2.09	27	80	58.04
Her Night of Love.....	52	64	3.09	42	78	27.99

TABLE 2—Continued

Book Title	Intelligence Group			Sex Group		
	Percent- age of Fast- learning	Percent- age of Slow- learning	Chi- square	Percent- age of Boys	Percent- age of Girls	Chi- square
Outdoor adventures of boys:						
<i>The Boy Rangers in the</i>						
<i>Great Smokies</i>	61	66	.56	74	52	10.63
<i>The Cruise of the Bobcat</i>	72	59	3.81	76	52	13.09
Mystery and detective stories:						
<i>Murder in the Green</i>						
<i>House</i>	81	77	.51	79	78	.. . . .
<i>The Skeleton Walks</i>	84	75	2.55	76	84	1.82
<i>The Mystery of the Miss- ing Men</i>	79	80	.09	80	79	.04
Adult adventure.						
<i>King of the Gangs</i>	49	64	4.77	73	37	26.71
<i>Pilot Peters on Patrol</i> . . .	73	80	1.28	90	61	25.53
<i>The Revenge of Pahonkas</i>	79	70	2.24	87	58	22.19
<i>Men from Mars</i>	72	63	2.20	72	62	2.15
<i>The Ghost Ranger of</i>						
<i>Lonesome Valley</i>	80	79	.. . .	85	73	4.42
<i>On the Oregon Trail</i>	82	83	.. . .	85	79	1.07
<i>Secret-Service Agent X-6</i>	71	69	.17	80	58	11.08
<i>Call in the G-Men</i>	67	77	2.48	84	58	16.98
<i>Fortunes of War</i>	62	63	.01	58	67	1.94
"Success" stories:						
<i>Tony Todd Makes Good</i>	75	67	1.57	73	68	.43
<i>Ned, the Newsboy</i>	72	72	.. . .	65	80	5.41
Sports.						
<i>Two Minutes To Play</i>	65	62	.16	78	46	23.55
<i>Two Strikes on McCarthy</i>	50	56	.55	69	35	23.74
School stories:						
<i>Meredith Hall</i>	57	60	.24	38	83	43.30
<i>Dick Davison at Denby</i>						
<i>High</i>	55	60	.50	65	49	5.79
Mythology:						
<i>The Man with the Mighty</i>						
<i>Hammer</i>	36	35	.01	41	29	3.12
<i>Ol' Paul and the Blue Ox</i>	49	50	.08	58	40	6.34
Travel stories:						
<i>Up and Down South</i>						
<i>America</i>	62	73	.03	69	65	2.54
<i>Pack and Travel</i>	50	57	1.50	59	47	2.99
<i>Life among the Head- Hunters</i>	58	50	1.48	73	32	35.67

There are unreliable differences favoring the slow group for titles of books of love and romance. The sex differences, however, are marked, the titles being rejected by the boys and emphatically accepted by the girls.

The appeal of stories of boys' outdoor adventures is high for boys but only moderate for girls. The sex differences are reliable. There are no reliable differences between the ability groups.

The appeal of mystery and detective stories is uniformly high for both sexes and both ability groups. The differences are small and insignificant.

The full-blooded and often violent adventures of adults make more appeal to boys than to girls, although the appeal to girls is appreciable. There is no indication that adventure appeals to one intelligence level more than to another except for a possible suggestion that crime stories appeal less to the brighter children.

The Alger type of "success" story seems to make a moderately high appeal to both sexes and both ability levels.

Stories of sports make a moderately high appeal to boys but little appeal to girls. There is no indication of an ability difference.

The appeal of titles of school stories is about equal for the two ability levels. The story about a girl has low appeal for boys, and the story about a boy only a moderate appeal for girls.

The appeal of the mythology titles seems to be rather low and less for the girls than for the boys. There is no indication of an ability difference.

The appeal of travel stories is moderately high for boys and low to moderate for girls. Where the element of violence is suggested, as in the case of the word "head-hunters" in the title, the sex difference is marked. The ability differences are small and inconsistent.

CHOICES OF NONFICTION

The results for nonfiction titles are shown in Table 3. There is some suggestion of a greater interest in nonfiction sports titles by the slow group. The boys show the greater interest—very markedly in the case of baseball and to a much smaller extent in the case of camping. The suggestion is that the sex difference is fairly specific to particular sports.

Again, small differences between the ability groups are shown for

accounts of exploration but a marked sex difference for one of the titles. Exploration tends to appeal primarily to boys, although the girls also show some interest.

As would be expected, the titles of descriptions of feminine activities yield some of the largest sex differences found. There are also indications of an ability differential, with the slow-learning group showing greater interest.

In general, hobbies appeal to both sexes, although airplanes are for boys, as are cameras to some extent. There seems to be evidence that material about manipulative hobbies makes more appeal to the slow-learning group. None of the titles in this group makes a particularly high appeal.

Science, at least in its mechanical and manipulative aspects, seems to have low appeal for girls. The appeal for boys seems only moderate except for specific topics, of which aviation is an example. There is no indication from these data that the topics appeal any less to the slow than to the fast group. In fact, the trend of the evidence is in the opposite direction.

The appeal of biographical materials appears to be moderately high, and the suggestion is that the appeal is higher for slow than for fast learners. Sex differences are marked, the direction of the difference being consistent with the sex of the individual being written about. The differences in favor of the slow learners are rather surprising and merit further study.

The problems of war have a moderately high appeal for boys at this age, but for girls the appeal is reliably lower. "Japan Loses the War" is the only title in the entire list which yields a reliably higher percentage of interest for the fast-learning group.

The titles dealing with self-improvement show complete consistency in appealing more to the slow group than to the fast group and more to the girls than to the boys. Some of the differences are reliable, and the others are probably reliable. This category yields the most conspicuous differences which have been found between the two ability groups. The genuineness of the difference is somewhat suspect, since it may not represent difference in underlying behavior. Insofar as it is genuine, it represents a significant and somewhat surprising finding.

The slow learners seem to be as interested as are the fast learners

TABLE 3

PERCENTAGE OF PUPILS, CLASSIFIED ACCORDING TO INTELLIGENCE AND SEX, WHO INDICATE DESIRE TO READ TITLES SHOWN AND RELIABILITY OF DIFFERENCES (NONFICTION)

BOOK TITLE	INTELLIGENCE GROUP			SEX GROUP		
	Percent- age of Fast- learning	Percent- age of Slow- learning	Chi- square	Percent- age of Boys	Percent- age of Girls	Chi- square
Sports:						
Making a Big-Leaguer...	40	54	4.15	69	21	48.53
Camping Hints.....	54	61	.97	62	53	2.02
Exploration:						
Climbing Mount Everest	70	64	.93	72	61	2.86
With Byrd at the South Pole	58	52	.78	70	38	21.28
Feminine activities:						
Be Your Own Dressmaker	31	36	.77	5	68	91.82
Cooking Is Fun.....	49	67	7.15	41	79	31.93
Hobbies:						
Candid Camera.....	46	58	3.44	57	46	2.40
Get Yourself a Hobby...	58	62	.39	59	62	.16
They Really Fly!.....	33	52	7.79	61	21	36.12
Science and invention:						
The Airplane of Tomor- row.....	69	63	1.13	80	48	22.94
Our Machine-made World.....	35	53	6.57	54	33	9.54
Friends among the Stars.	32	52	8.64	40	46	.75
All from a Lump of Coal.	34	49	4.46	46	37	1.62
Why Did It Catch Fire?..	52	59	.86	64	46	6.34
What Makes It Run?..	34	51	6.34	59	23	28.38
Biography and biographical adventure:						
Born an Inventor	52	72	8.85	76	47	17.68
King Richard, the Lion- hearted.....	66	61	.70	75	49	14.76
Cabin Boy for Columbus	46	61	4.83	66	38	16.82
Fliers All	43	59	5.20	68	32	26.95
Queens of the Silver Screen.....	47	61	4.51	36	75	30.03
War:						
Must America Fight?..	61	64	.29	73	50	12.14
Japan Loses the War ..	64	44	8.73	62	44	6.53

TABLE 3—*Continued*

BOOK TITLE	INTELLIGENCE GROUP			SEX GROUP		
	Percent- age of Fast- learning	Percent- age of Slow- learning	Chi- square	Percent- age of Boys	Percent- age of Girls	Chi- square
Self-improvement:						
Eat and Keep Healthy	32	57	13.43	39	53	3.91
Friends for the Asking...	59	74	5.20	56	79	12.01
Politeness Pays	46	73	16.15	53	67	4.37
Streamline that Face.	38	51	3.73	29	63	23.35
Occupations,						
Is There a Doctor in the						
House?	58	62	.23	58	62	.29
Man Bites Dog	83	73	3.18	81	74	1.79
Don't Be an Actress . .	41	46	.68	18	74	64.85
Money-making and practical:						
Me and My Job	44	71	15.49	58	57	.03
Money-making Ideas . . .	49	55	.79	55	48	1.00
Self-supporting College..	52	71	7.98	61	63	.05

in the lives of doctors, reporters, and actresses, even though the probability that they will enter these occupations is much less. The life of the actress is of purely feminine appeal, while the other two titles show no sex differences.

Again in the case of books concerned with money-making or practical themes, there tends to be a reliable difference in favor of the slow-learning group. The practical seems to make relatively little appeal to the fast learners—possibly in part because of their superior economic status. It is somewhat ironic that the greater interest in working their way through college is felt by a group with an average intelligence quotient of 88. The sex differences for these titles are negligible.

SUMMARY OF DIFFERENCES

A general summary of the differences associated with ability levels indicates that slow-learning children chose with reliably greater frequency one or more titles in the categories: (1) useful feminine activities, (2) hobbies, (3) science and invention, (4) biography and biographical adventure, (5) self-improvement, (6) money-making and practical themes, and (7) mild adventures of children. Fast-learning

children chose with reliably greater frequency one of the titles on war. These are the only categories in which reliable differences appear between the ability levels. Large differences between the sexes are common and appear in many of the categories.

There are few individual titles which show reliable differences between the bright and the dull children. Of the eighty titles shown in Tables 2 and 3, ten give reliable differences between the fast- and slow-learning groups, and eleven more give differences which are probably reliable. The other fifty-nine yield no differences or differences too small to satisfy even the standard of "probably reliable" used here. This result can be compared with the differences between the boys and the girls. Of these, forty are reliable, and ten more are probably reliable. Clearly, in a determination of the pattern of reported reading interests, sex is a vastly more important factor than even the large difference in intelligence level characterizing these groups.

In nineteen of the twenty-one cases in which there are reliable or probably reliable differences between the intelligence groups, the difference is in the direction of more frequent choice by the slow-learning group. Several alternative explanations present themselves. (1) The slow-learning children may have a lower threshold for saying "Yes." They may yield more readily and indiscriminately to the suggestive effect of the test situation. Support is given to this suggestion by the fact that the slow-learning children more frequently chose the catch items listed earlier. (2) Many of the items on the questionnaire may be pitched at a maturity level too low to engage the interest of gifted twelve-year-old children. (3) Interests may diversify with advancing intellectual maturity so that single titles do not have the generality of appeal that they had on a lower mental level. All these possibilities seem plausible in the present situation.

The items on the questionnaire had been rated by a group of graduate students—school psychologists, elementary-school supervisors or principals, and teachers of the grades included in this study. One set of ratings called for a judgment of the value of the title for recreational reading for these grades, while a second set called for a judgment of difficulty of reading for a slow learner in these grades. Two correlations were found: one between the average ratings on quality and on interest and the other between the average ratings

on difficulty and on interest. These correlations were substantially zero for both ability levels. There is no consistent tendency for children in Grades VI, VII, and VIII to prefer either the less or the more valuable reading materials, as judged by teachers. Nor is there any tendency for the slow-learning groups to show less interest in topics which seem likely to be presented in a manner involving difficult reading.

COMPARISON OF ACTUAL READING DONE BY SAME PUPILS

Two months after the questionnaire on reading interests was administered, 173 of the 208 children gave the experimenter a list of the materials which they had read in the meantime. It is worth while to compare this actual reading with the interests reported on the questionnaire. The classification of the material read presents difficulty and is necessarily subjective. However, certain interesting trends appear.

In the first place, although the pupils reported a great deal of interest in a number of the nonfiction titles, the actual reading included a vast majority of fiction. In general the fiction read corresponded fairly closely with the types of fiction titles chosen on the questionnaire. Second, in actual reading, marked discrepancies appeared between the fast and the slow groups. These discrepancies were not so much a matter of general type of appeal as a question of range of titles and literary quality. The fast-learning group reported reading almost exactly twice as many items as the slow-learning group. Not only were more titles read by the former group, but the titles covered a wider range. Furthermore, although there were twice as many titles for the gifted group, the number that represented duplication was less. Perhaps the most striking difference, indicative of the quality of the reading, was in the number of "comics" reported. These represented 100 of the 282 items reported by the slow-learning group, while for the fast learners they made up 23 of the 560 items reported. Taken in combination with the questionnaire results, these findings would suggest that, although fast- and slow-learning groups in the upper elementary grades may have much the same topical interest patterns, educators must expect the reading through which these interests are satisfied to differ markedly both in amount and in medium of expression.

PERCEPTUAL LEARNING IN PENMANSHIP

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THE PSYCHOLOGY OF PERCEPTION IN HANDWRITING

THE skills involved in learning to write are chiefly of a sensorimotor character, and sensorimotor learning is the adaptation of a movement to a stimulus. There are three possible lines of thought in developing the psychology of handwriting, namely:

(1) The nature of the movement in handwriting; (2) its adaptation, or development; and (3) the nature of the stimulus which directs the adaptation. Pursuing these lines of thought, one arrives finally at the following definition of the particular process of learning that is involved: *Learning to write is the gradual adaptation of the handwriting movement to a gradually developing perception of form. One finds, moreover, that out of the adaptation of movement comes speed, and out of the development of perception comes quality of product, and that the relation between speed and quality of handwriting may be distinguished in the relation which exists between the adaptation of movement and the development of perception.*¹

The perception of form.—Learning to write is not wholly the perfection of movement through practice; perception of form is also involved. Perception of form is both the chief motive which leads to the production of correct movements and a skill which is gradually developed. A pupil may recognize a letter, but, in reproducing it, he must know how the form is developed. In his first trials at reproduction, attention to muscular activity tends to detract from attention to form. Attention is directed to the form of the copy and not to the form in the mind.

Perception of letter forms need not be perfect before the writing of the forms occurs. "Complete perception of form follows practice in writing. While the pupil through extended practice is endeavoring to reproduce the letter forms, he constantly is improving in his per-

¹ Harry Grove Wheat, *The Psychology of the Elementary School*, p. 261. New York, Silver, Burdett & Co., 1931.

ception of the forms. To considerable extent perception and movement develop together.”¹

It seems that training in perception of letter formation may result in improvement in handwriting ability. Such training can be rendered through the use of devices or exercises. The analysis of the letters of the alphabet shows that certain strokes repeat themselves in the formation of the letters. Drill in the recognition of such stroke characters would seem to be one method of improving handwriting.

PRACTICE EXERCISE IN PERCEPTUAL LEARNING IN PENMANSHIP

Construction of the exercise.—For this experiment an exercise in perceptual learning was devised for use in remedial-penmanship classes at the junior high school level. The small letters were analyzed and divided into one-stroke parts. Each part was given a number. If a similar stroke was found in more than one letter, it received the same number in each case.

A part of the exercise consisted of a cardboard on which were placed thirty cards, each having on the left a list of the small letters containing a particular stroke and on the right the stroke itself. The cards were arranged in rows, six rows across and five down. Each card was numbered, and the cards were labeled from left to right with the numbers used consecutively. Also, there were thirty separate cards, each exactly like the right side of each of the thirty cards located on the cardboard. These were numbered on their backs.

Method of using the exercise.—Each subject was allowed ten trials of placing the small cards on their duplicates. The time in seconds required to place all the cards was recorded, and the number of incorrect card placements was also kept. No study of the material was permitted before any trial in order that the scores should be a result of natural development of perceptual learning.

THE INVESTIGATION

Purpose and the subjects.—The purpose of this investigation was to study the improvement of form in handwriting through the use of a practice exercise in perception.

¹ *Ibid.*, p. 268.

The experiment was carried on in a laboratory with fifteen junior high school pupils. The subjects consisted of a group of remedial handwriting cases selected through the use of the Ayres Measuring Scale for Handwriting, Gettysburg Edition, and the Freeman Chart for Diagnosing Faults in Handwriting. In each case letter formation was rated 1 by the use of the Freeman chart, and handwriting scores on the Ayres scale were ranked as 20, 30, or 40. Poor letter formation was the predominate cause of unsatisfactory writing.

Procedure.—Each subject, performing the task as rapidly as possible, made ten trials of placing the small characters on their duplicates. As soon as one trial was completed, another was begun. The pupils worked in pairs, and two twenty-five-minute periods were ordinarily used by a pair in completing the exercise. As only one exercise device was available, two weeks were required for all subjects to complete the exercise.

The exercise gave practice in the visual recognition of the similarity of each separate character card and its duplicate and the rejection of all others. It was purely an exercise in perceptual learning; the muscular activity involved was almost negligible.

Tabulation of learning.—Each pupil, in the presence of his partner and the instructor, checked his errors and kept a record of the number of seconds required for each trial and also a record of the number of errors on each trial. An error was defined as a card which was found to be incorrectly placed when the corresponding numbers were checked at the end of each trial.

After the two weeks spent by the pupils in performing the exercise were past, the Ayres Measuring Scale for Handwriting and the Freeman Chart for Diagnosing Faults in Handwriting were repeated for the purpose of determining the improvement in handwriting which occurred during the period of training in perceptual learning.

RESULTS

Analysis of the record of time.—The average number of seconds and the range of time on each of the ten trials are given in Table 1. On the first trial the average time was 228.27 seconds; on the tenth trial the average time was 91.13 seconds, or about a third of the time required for the first trial. The average time decreased in every suc-

cessive trial except one; the fifth trial required one second more than the fourth trial. The greatest gains in speed occurred in the first two trials—a result which is in keeping with other studies of learning.

The range of time in all trials gives evidence of great individual differences in speed. The range between the smallest and the greatest speed scores is smallest in the third and the tenth trials.

The fastest-working subject on the first trial completed the exercise in 122 seconds, while on the last trial the fastest-working pupil

TABLE 1
AVERAGE TIME AND RANGE OF TIME OF
FIFTEEN PUPILS ON TEN TRIALS OF
PERCEPTUAL LEARNING IN HAND-
WRITING

Trial	Average Number of Seconds	Range in Number of Seconds
1.	228 27	122-289
2	173.00	91-270
3	139 33	87-195
4	126 13	55-185
5	127 13	40-195
6	117 47	50-180
7	110.20	55-175
8	104.07	40-165
9	96 33	35-160
10	91 13	30-148

required only 30 seconds—a decrease of 92 seconds. The lowest time record was made in the tenth trial, but there was not a continuous decrease in time for the fastest-working pupil from one test to another in regular order. There was a similar decrease in time for the slowest-working pupil. In general the change of time shows that learning occurred.

Number of errors.—The accuracy of the subjects is shown in Table 2. The average number of errors on the first trial was 5.7; on the tenth trial, 1.6. The group was not particularly inaccurate on the test at the beginning; neither was it perfectly accurate at the end of the experiment. The percentage of accuracy in the first trial was 80.9. By the third trial the gain had become approximately half of the amount possible. At the end of the last trial there was still

opportunity for gain in accuracy, the percentage of accuracy at that time being 94.7. Apparently the group was as accurate on the fifth as on the eighth trial, and it was most accurate on the sixth, the ninth, and the tenth trials. It was most accurate of all on the last trial. There was one striking dip in accuracy, namely, at the seventh trial. At the time this dip occurred, there was a gain in speed, which may have caused the dip in accuracy.

TABLE 2
AVERAGE AND TOTAL NUMBER OF ERRORS AND
PERCENTAGE OF ACCURACY OF FIFTEEN PU-
PILS ON TEST OF PERCEPTUAL LEARNING IN
PENMANSHIP

TRIAL	ERRORS		PERCENTAGE OF ACCU- RACY*
	Average Number	Total Number	
1.	5.7	86	80.9
2.	4.8	72	84.0
3.	2.9	44	90.2
4.	2.8	42	90.7
5.	2.7	40	91.1
6.	2.4	36	92.0
7.	3.1	46	89.8
8.	2.7	40	91.1
9.	2.1	32	92.9
10.	1.6	24	94.7

* The percentage of accuracy was obtained by subtracting from the highest possible score the number of errors made by the group and dividing the remainder by the highest possible score.

Individual differences in learning.—Individual differences in learning are shown in Table 3. Subject 5, who on the first trial required the greatest amount of time (289 seconds) to complete the exercise, required only 135 seconds at the last trial. The difference of 154 seconds represents a gain of 53.3 per cent in speed of perception. The table shows that five of the six pupils who made the smallest percentages of gain were the fastest at the beginning. Subject 12 was an exception to the tendency for the pupils who were the fastest at the beginning to make the smallest gains, and Subjects 4 and 5 were exceptions to the tendency for the slowest pupils at the beginning to make the largest percentages of gain. Subject 1, who was the fastest at the beginning, made the fewest errors of all pupils in the experi-

ment. Subjects 1, 6, 12, and 14 made no errors on either the first or the last trial, and the errors that they made in other trials probably occurred in efforts to gain in speed. The greatest total number of errors was made by a pupil who decreased his time for completing the exercise by approximately half. These facts show that error reduction occurred as perceptual learning took place.

TABLE 3

TIME FOR FIRST AND LAST TRIALS, NUMBER OF ERRORS ON FIRST AND LAST TRIALS, AND TOTAL NUMBER OF ERRORS FOR INDIVIDUAL SUBJECTS

SUBJECT	NUMBER OF SECONDS				NUMBER OF ERRORS		
	First Trial	Last Trial	Difference	Percentage of Gain	First Trial	Last Trial	Total for Experiment
5.	289	135	154	53.3	8	2	36
2.	287	60	227	79.1	10	2	42
6.	280	60	220	78.6	0	0	8
4.	270	148	122	45.2	16	4	80
8.	260	104	156	60.0	8	4	46
9.	240	65	175	72.9	10	0	36
7.	233	30	203	87.1	4	0	10
13.	230	63	167	72.6	4	0	20
14.	228	96	132	57.9	0	0	8
3.	223	118	105	47.1	8	8	64
11.	220	115	105	47.7	10	2	54
12.	209	64	145	69.4	0	0	6
10.	193	120	73	37.8	4	2	20
15.	140	130	10	7.1	4	0	30
1.	122	60	62	50.8	0	0	2

Effect of perceptual learning of letter formation on handwriting ability.—The scores on handwriting and on letter formation of the fifteen subjects on both the pretest and the final test are shown in Table 4. Each subject was rated 1 on letter formation at the beginning of the experiment. Three scores were perfect on the final test, two were almost perfect, and five were at least three times as good as the original scores. In only one case was there no improvement in letter formation.

The effect on textual writing of improvement in letter formation is also evident in this table. Three, or 20 per cent, of the subjects showed a gain of thirty points in handwriting ability. These pupils raised the level of their handwriting by three steps on the Ayres

scale after the training in improving their perception of the handwriting symbols. Seven improved by two steps. All others, except Subject 3, improved by one step. The one subject who did not improve on the Ayres scale likewise did not improve in letter formation.

TABLE 4
IMPROVEMENT IN LETTER FORMATION AND IN HAND-
WRITING ABILITY OF FIFTEEN PUPILS GIVEN
TRAINING IN PERCEPTION OF FORM

SUBJECT	SCORE IN LETTER FORMATION (FREEMAN CHART)			SCORE IN HANDWRITING (AYRES SCALE)		
	First Test	Second Test	Gain	First Test	Second Test	Gain
1	1	5	4	30	50	20
2	1	4	3	30	40	10
3	1	1	.....	20	20	..
4	1	3	2	20	30	10
5	1	2	1	20	30	10
6	1	5	4	40	60	20
7	1	4	3	20	40	20
8	1	3	2	20	30	10
9	1	2	1	20	40	20
10	1	3	2	20	50	30
11	1	5	4	40	60	20
12	1	2	1	20	50	30
13	1	3	2	20	40	20
14	1	3	2	30	60	30
15	1	2	1	30	50	20

GENERAL SUMMARY AND CONCLUSIONS

The object of this experiment was to study the possibility of improving handwriting by teaching letter formation through the use of a perceptual-learning exercise. The results are limited to those obtained from a group working under controlled conditions.

The following results were noticeable: (1) Each subject reduced his number of errors and decreased the amount of time in ten practices. (2) There was a tendency for the slowest-working pupils to increase their speed in perceptual matching more than did the fastest pupils. (3) Learning was most rapid during the early attempts. (4) Great individual differences were found in speed and accuracy. (5) Training in perceptual learning appears to have been productive of worth-while results.

SELECTED REFERENCES ON FOREIGN EDUCATION

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THE effects of the wars in Europe and Asia on education in countries both combatant and neutral are naturally matters of much interest to educators in the United States. What has happened to the school system that was being rapidly developed in China when Japan began its invasion of the country? Are the appropriations for education in France and England being cut? Is any school system continuing in Poland? Was Finland able to maintain schools at the same time that it was defending itself against daily, almost hourly, attacks? Is there now a public-school system in Czechoslovakia, and, if so, what is its nature? These are questions of more than passing concern, and accordingly the list of references for this year has in it many relating to education in wartime. Not all the many questions can be answered. Censorship is very strict in some of the areas, and reliable data are not available.

The situation in England is commented on freely in such journals as the *London Times Educational Supplement*, *Schoolmaster & Woman Teacher's Chronicle*, *School Government Chronicle and Education Review*, *Scottish Educational Journal*, and others. The evidences of censorship are more manifest in France, but *L'Information universitaire*, *L'Ecole libératrice*, *L'Ecole et la vie*, and the *Journal des instituteurs et des institutrices* make many comments and publish the various circulars issued by the Ministry of National Education. In both countries the evacuation of school children from danger zones and a determination that the intellectual life of the young people shall suffer as little as possible because of the war are strong policies of the governments. Little is known of the situation in Poland, Czechoslovakia, and Finland. Occasional unofficial reports come from China.

A second point of special interest in the United States at present is the cultural life of Latin America. Accordingly more than the

usual number of references to works relating to education in Central and South America are included.

GENERAL REFERENCES

324. BUREAU INTERNATIONAL D'EDUCATION. *Annuaire international de l'éducation et de l'enseignement*, 1939. Publications du Bureau International d'Education, No. 65. Geneva: Bureau International d'Education, 1939. Pp. 518.

The seventh of a series giving the principal events in education for the year. This volume is for 1937-38 and contains data from sixty countries.

325. BUREAU INTERNATIONAL D'EDUCATION. *L'Enseignement de la géographie dans les écoles secondaires*. Publications du Bureau International d'Education, No. 67. Geneva: Bureau International d'Education, 1939. Pp. 210.

Forty-four countries furnished the data for this study. Briefly the data are on (1) the place of geography in secondary instruction; (2) importance of promotion and leaving examinations; (3) aims, whether practical, cultural, or informational; (4) programs and their emphasis on physical, human, or economic aspects; (5) methods of teaching, with respect to emphasis, correlation with other subjects, research, correspondence, etc.; (6) equipment, such as special rooms, laboratory, library, documentary films, collections; (7) general and special training of teachers of geography.

326. BUREAU INTERNATIONAL D'EDUCATION. *L'Organisation de l'éducation préscolaire*. Publications du Bureau International d'Education, No. 68. Geneva: Bureau International d'Education, 1939. Pp. 216.

Compiled from data furnished by forty-three countries. Tells of (1) administration and organization of the schools; (2) programs, methods, and hours; (3) general and special training of teachers.

327. BUREAU INTERNATIONAL D'EDUCATION. *La Rétribution du personnel enseignant secondaire*. Publications du Bureau International d'Education, No. 66. Geneva: Bureau International d'Education, 1939. Pp. 356.

Compiled from data furnished by fifty-three countries. *Rétribution* here includes salaries for the different categories of secondary-school teachers and a comparison of these salaries with the salaries of other public officials; supplementary privileges, such as lower tuition fees for their children, additional activities for which they may be paid; regulation of hours of work; sickness and retirement benefits; rights accorded foreigners in secondary schools of the country; and conditions in the private schools.

328. DUGGAN, STEPHEN. "The War and the Campus," *News Bulletin* (Institute of International Education), XV (March 1, 1940), 3-5.

A general résumé of the effects of war on education, with an attack on totalitarianism and a defense of democratic institutions.

329. HOLLAND, KENNETH. *Youth in European Labor Camps*. A Report to the American Youth Commission. Washington: American Council on Education, 1939. Pp. xiv+304.
A general account of labor camps in the United States, Germany, Denmark, Sweden, England and Wales, Switzerland, Austria, Czechoslovakia, and Holland.
330. "The International Student Organizations in War Time," *Intellectual Co-operation Bulletin* (International Institute of Intellectual Co-operation), Nos. 1-2 (January, 1940), pp. 27-30.
Tells of the attempts that are being made to continue the international student movement in spite of the many difficulties caused by the war.
331. KANDEL, I. L. (editor). *Educational Yearbook of the International Institute of Teachers College, Columbia University, 1939*. New York: Teachers College, Columbia University, 1939. Pp. xxiv+364.
This volume is devoted to "the meaning of liberal education in the twentieth century," and it presents the views of leading educators in seventeen countries.

BY COUNTRIES

AFRICA

332. LEUSNER, HERMANN. *Die Entwicklung des Schulwesens in den deutschen afrikanischen Kolonien, jetzigen Mandatsgebieten, vom Ende des Weltkrieges bis zur Gegenwart*. Cologne: Buchdruckerei Orthen, 1938. Pp. 286.
A doctoral dissertation from the University of Cologne on the development of education in the former German African colonies from the World War to the present.

ARGENTINA

333. MINISTERIO DE JUSTICIA E INSTRUCCIÓN PÚBLICA, CONSEJO NACIONAL DE EDUCACIÓN. *Educación común en la capital, provincias y territorios nacionales, año 1938*. Buenos Aires: Talleres Gráficos del Consejo Nacional de Educación, 1939. Pp. 912.
The official annual report on education in Argentina; very detailed and with many statistical tables.
334. MINISTERIO DE JUSTICIA E INSTRUCCIÓN PÚBLICA, CONSEJO NACIONAL DE EDUCACIÓN. *Programas de instrucción primaria, distribución por asuntos e instrucciones*. Buenos Aires: Talleres Gráficos del Consejo Nacional de Educación, 1939. Pp. 522.
The programs of study for the primary schools of Argentina, prepared by a didactic commission and adopted by the National Council of Education July 17, 1939. Covers the first six years of instruction, not including kindergarten.

AUSTRALIA

335. RADFORD, WILLIAM C. *The Educational Needs of a Rural Community*. Australian Council for Educational Research Series, No. 56. Melbourne: Melbourne University Press, 1939. Pp. 184.

The author reports on a district in Victoria, Australia, of nine hundred square miles including a township of four thousand persons. The cultural and the vocational life of the community are analyzed with a view to determining whether the type of education offered is best suited to community needs.

336. SWEETMAN, EDWARD. *History of the Melbourne Teachers' College and Its Predecessors*. Australian Council for Educational Research Series, No. 57. Melbourne: Melbourne University Press, 1939. Pp. 144.

Melbourne was founded about 1837. This jubilee history of the Teachers' College tells of the struggles of the new community to establish an education system and prepare good teachers for it.

BELGIAN CONGO

337. LEASURE, NETTIE NORRIS. *Education for the BaKongo Village*. North Manchester, Indiana: Privately printed by the author at Manchester College, 1939. Pp. xx+242.

Part I of this volume is a sociological study of BaKongo life. On that is based the scheme of education suggested in Part II, while Part III presents a proposed course of study for the village schools.

BELGIUM

338. MINISTÈRE DE L'INTÉRIEUR, OFFICE CENTRAL DE STATISTIQUE. *Annuaire statistique de la Belgique et du Congo Belge, 1939*. Ghent: S. A. anct Maison d'Édition Vanderpoorten & Co., 1939. Pp. cl+22+314.

Contains the latest official statistics on education in Belgium and the Belgian Congo, with comparative figures for several previous years

BRITISH COLONIES

339. GREAT BRITAIN. COLONIAL OFFICE. *Education in the Windward and Leeward Islands*. Report of the Education Commissioners, 1938. London: His Majesty's Stationery Office, 1939. Pp. 66.

The second official report of the commissioners. Important in that it is the record of the beginnings of an attempt to improve greatly educational conditions in these islands.

340. JAMAICA EDUCATION DEPARTMENT. *Annual Report of the Education Department for the Year Ended 31st March, 1939*. Kingston: Government Printer, 1939. Pp. 68.

The report records that, though the year was one of disturbance in Jamaica, with strikes, riots, and other disorders, the period was one of exceptional development and activity. A new syllabus for elementary schools came into force; schools, teachers, and salaries were all regraded; the first senior school

in Jamaica was opened, a second practical training-center for boys was opened; important changes were made in the scholarship system; an investigation into the comparative mental capacity of Jamaican children was carried out; and a handbook for teachers was published.

341. JORDAN, A. B. "Children's Institutions in Malaya," *School Government Chronicle and Education Review*, No. 3171 (October, 1939), pp. 60, 61

An address by the secretary for Chinese affairs, Malaya, in which he tells about the care provided for orphans and homeless children.

342. LINEHAN, W. *Annual Report on Education in the Straits Settlements and the Federated Malay States for the Year 1938*. Singapore: Government Printing Office, 1939. Pp. 218.

The systems of schools maintained in these states seem to be more than ordinarily successful in unusually difficult situations. The annual report is interesting.

343. MCOWAN, G. *Annual Report of Raffles College, Singapore, for the Academic Year 1938-1939*. Singapore: Malaya Publishing House, Ltd., 1939. Pp. 40.

The suggestion for Raffles College was first offered in 1918; the College was formally opened in June, 1929, to prepare qualified teachers for secondary schools in Malaya and to offer training in higher technical and scientific subjects to young men and women who desire education of a university type. An interesting account of the growth of a young institution.

344. NEWFOUNDLAND GOVERNMENT. *Annual Report of the Department of Education for the Calendar Year 1938*. St. John's: Robinson & Co., Ltd., 1939. Pp. 34.

An unusually good report on a small education system that is making considerable progress

CANADA¹

345. DOMINION BUREAU OF STATISTICS, EDUCATION STATISTICS BRANCH. *Higher Education in Canada, 1936-38*. Being Part II of the Biennial Survey of Education in Canada, 1936-38. Ottawa: J. O. Patenaude, I.S.O., 1939. Pp. 98.

Official statistics and a good discussion of supply and demand in the professions in Canada.

346. DOMINION BUREAU OF STATISTICS, EDUCATION STATISTICS BRANCH. *Survey of Libraries in Canada, 1936-38*. Being Part III of the Biennial Survey of Education in Canada, 1936-38. Ottawa: J. O. Patenaude, I.S.O., 1939. Pp. 74.

A summary of the situation in Canada, some comparisons with the United States, and statistics

¹ See also Item 19 (Fletcher) in the list of selected references appearing in the January, 1940, number of the *Elementary School Journal*.

CHILE

347. LABARCA H., AMANDA. *Historia de la enseñanza en Chile*. Santiago: Imprenta Universitaria, 1939. Pp. xvi+400.

A history of education in Chile from the earliest colonial days to the present time.

CHINA

348. WEN-JIAN, KIANG. "Student Life in War-Time China," *China Information Service* (Washington), Issue 39 (March 1, 1940), pp. 7-10.

Deals mainly with the removal of the universities from the eastern to the western provinces of China and the conditions in which they are now being maintained.

COLOMBIA

349. MINISTERIO DE EDUCACIÓN NACIONAL, DIRECCIÓN DE NORMALES. *Plan y programas para las escuelas normales*. Bogotá: Imprenta Nacional, 1939. Pp. 174.

The official programs of study for the regular and rural normal schools, together with administrative regulations and advice to teachers.

COSTA RICA

350. SECRETARIA DE EDUCACIÓN PÚBLICA. *Programas de segunda enseñanza*. San José. Imprenta Nacional, 1939. Pp. 94.

The official programs for the secondary schools, prepared by a technical council and approved in January, 1939.

CUBA

351. AGUAYO, A. M., y AMORES, H. Mz. *Pedagogía para escuelas y colegios normales*. Havana: Cultural, S.A., 1940. Pp. 388.

In three parts dealing with fundamental principles of education, general didactics, and special didactics. Written to meet a need in educational efforts in Cuba.

DENMARK

352. "Skolen og Krigen," *Folkeskolen*, Nr. 6 (8 Februar, 1940), 101.

Opinions expressed at a district meeting on the question of whether war news should be discussed in school.

353. STATISTISKE DEPARTEMENT. *Statistisk Aarbog*, 1938. Danmarks Statistik. Copenhagen: Bianco Lunos Bogtrykkeri A/S, 1938. Pp. xxxii+292.

The forty-third yearbook of the Department of Statistics in Denmark. It includes a section of statistics on education.

ECUADOR

354. PICCO DE AILLÓN, MARIETTA, y AILLÓN TAMAYO, CARLOS. *Organización y prácticas escolares*. Quito: Talleres de Educación, 1939. Pp. 210

A good brief survey, in part historical, of primary education in Ecuador.

ENGLAND

- 355 BOARD OF EDUCATION. *Education in 1938*. London: His Majesty's Stationery Office, 1939. Pp. xii+212.
The official annual report on education in England and Wales
- 356 "The Boy Scouts' Mobilization," *Times Educational Supplement* (London), No. 1280 (November 11, 1939), p. 433.
Mobilization really began in 1938, and by September, 1939, a huge national service was prepared to act promptly and efficiently. This article tells of the many essential services performed by the Boy Scouts.
357. "Compulsory Education in Evacuation Areas," *School Government Chronicle and Education Review*, No. 3175 (February, 1940), pp. 113-16.
The full text of the speech made in the House of Lords on February 7, 1940, by the president of the Board of Education. A review of the difficulties caused by the war and an assurance that compulsory education will be enforced in all areas as rapidly as possible
358. A CORRESPONDENT. "Girls' Clubs in War-Time," *Times Educational Supplement* (London), No. 1279 (November 4, 1939), p. 425.
Discusses the many difficulties under which the girls' clubs are now operating and what the National Council of Girls' Clubs is trying to do to overcome these difficulties.
359. DE LA WARR, LORD. "Education—Part of the Home Front," *Listener*, XXII (October 26, 1939), 807-9.
The president of the Board of Education stresses that the conflict of interests and ideals that this war represents will be decided "by the health, the skill, the intelligence, the staying power, and the character of the individual members of the different nations" and urges that the young people be not neglected.
360. "Education during the War," *Schoolmaster & Woman Teacher's Chronicle*, CXXXVII (February 8, 1940), 138.
The recommendations made to the president of the Board of Education of England and Wales by the executive of the National Union of Teachers
361. "Girl Guides Mobilized," *Times Educational Supplement* (London), No. 1281 (November 18, 1939), p. 441.
Summarizes the varied forms of war service being carried on by the Girl Guides.
362. "The Great Exodus," *Times Educational Supplement* (London), No. 1271 (September 9, 1939), p. 357.
The *Times* states that evacuation of more than three million children and adults from crowded towns and industrial areas had just been accomplished.
363. ISAACS, SUSAN. "Cambridge Survey of Evacuees," *Times Educational Supplement* (London), Nos. 1291 and 1292 (January 27 and February 3, 1940), pp. 27, 42.

An attempt to estimate the success or the failure of the relation between the foster-parent and the foster-child in the cases of 304 London children who were billeted in Cambridge.

364. JACKSON, CYRIL. "Lessons at Home," *Listener*, XXII (December 21, 1939), 1205-8.

Tells what the city of Sheffield is doing to provide education during wartime for the fifty-five thousand children who were not evacuated.

365. LONDON COUNTY COUNCIL. *Report of the School Medical Officer for the Year 1938*. London: London County Council, 1939. Pp. 74.

The annual report of the school medical officer of London is always valuable and interesting. Regularly it indicates that progress is being made in the care of school children in that city.

366. MOORE, R. W. "Teaching for War and After: History with the Gloves Off?" *Times Educational Supplement* (London), No. 1293 (February 10, 1940), p. 53.

The first instalment of an article that attempts to answer the question: "How will the war, how ought the war, to affect our attitude to what we teach, and the content of what we teach?"

367. SPECIAL COMMISSIONER. "Bravo Birmingham! The Story of War-Time Education in a Great City," *Schoolmaster & Woman Teacher's Chronicle*, CXXXVII (January 4, 1940), 1, 5.

The author feels that the education authorities of Birmingham handled with unusual skill the difficult situation created by the war.

368. SPECIAL COMMISSIONER. "Conquest of the Heart of Wales," *Schoolmaster & Woman Teacher's Chronicle*, CXXXVII (January 11, 1940), 21, 27.

One of a series of articles on the schools in wartime. Tells what communities in Wales did for evacuated children.

369. "Success or Failure? The Lessons of Evacuation," *Times Educational Supplement* (London), No. 1292 (February 3, 1940), pp. 43-44.

A good discussion of the failures and the successes of the evacuation scheme by which school children and younger children were moved from danger areas to places that were considered safer.

370. SWIFT, FLETCHER HARPER. *The Financing of Grant-aided Education in England and Wales*. European Policies of Financing Public Educational Institutions, V. University of California Publications in Education, Vol. VIII, No. 5. Berkeley, California: University of California Press, 1939. Pp. xviii+(695-972).

The fifth of a series by this author. The first four dealt with France, Czechoslovakia, Austria, and Germany.

371. TAYLOR, WILLIAM SEPTIMUS. *Education in England*. Bulletin of the Bureau of School Service, Vol. XI, No. 4. Lexington, Kentucky: College of Education, University of Kentucky, 1939. Pp. 138.

A description of some of the schools visited by the author in a year of study of schools in England, with some comments on the organization and administration of education in that country.

372. WILLIAMS, W. E. "Keeping Education Going," *Listener*, XXII (October 19, 1939), 756-58.

Describes the education of the evacuated children and the wide range of courses that are available for adults even in wartime.

373. "The Year's Work in Education—before and during the War," *Times Educational Supplement* (London), No. 1287 (December 30, 1939), p. 501.

A brief review of what was done in education in England in the year 1939, with special emphasis on emergency measures for wartime.

ESTONIA

374. *Kutseharidus Eestis*. Tallinn: Haridusministeeriumi Kutseoskuse Osakonna Valjaanne, 1938. Pp 490.

An official account of vocational education in Estonia, prepared by the Department of Vocational Education of the National Ministry of Education. Well illustrated

FINLAND

375. CAVONTIUS, GÖSTA. "Betydelsefullt reformarbete avbrytes genom kriget," *Svensk lärartidning*, Nr. 51-52 (23 December, 1939), 1467-68.

A brief account of significant educational reforms in Finland broken off by the war.

376. KOVERO, MARTTI, ET AL. *Kansanopetustilasto Kansakoululaitos Lukuvuonna 1936-37*. Suomen Virallinen Tilasto. Helsinki: Valtioneuvoston kirjapaino, 1939 Pp. vi+140

Statistics on the elementary school in Finland for the school year 1936-37

- 377 KOVERO, MARTTI, ET AL. *Oppikoulu. Tilastollinen Katsaus Oppikoulujen Tilaan ja Toimintaan Lukuvuonna 1937-38*. Suomen Virallinen Tilasto. Helsinki: Valtioneuvoston kirjapaino, 1939. Pp. 102.

A statistical survey of the status and work of the secondary school in Finland during the school year 1937-38.

378. LAURILA, JUHA. *Finland, the Young Republic of the North*. Publications of the National Union of Students of Finland, No. 11 Helsinki. Suomen Ylioppilaskuntien Liitto, 1938 Pp 268.

According to the Introduction, "It has long been one of the aims of the National Union of Students of Finland to spread information relating to Finland among the educated youth of other countries, to correct so far as possible the erroneous ideas still entertained abroad of this country." Among the chapters concerned particularly with education are those on the Kalevala, Finnish universities, Finnish undergraduate organizations and their activities, and the College of Athletics

379. LEIVISKÄ, I. (editor). *The Finland Year Book, 1939-40*. Helsinki: Oy. Suomen Kirja, Ltd., 1939. Pp. 464.

Among chapters devoted to educational subjects are those on education and culture, the church and religious life, Finnish peasant culture and measures for preserving it, modern pictorial art in Finland, architecture, contemporary Finnish music, dramatic art, and domestic-science educational work.

380. SANDEN, AND. "Bland evakuerade i Finland," *Svensk lärartidning*, Nr. 4 (27 Januari, 1940), 93, 118-19.

Impressions of a Swedish teacher from a trip among the evacuated in Finland.

381. "Varre-Värst. Tjänsteplikt," *Lärarinneförbundet*, Nr. 49 (6 December, 1939), 1; Nr. 4 (24 Januari, 1940), 1.

Actual conditions in the evacuation of school children and the work of teachers in Finland compared with plans for evacuation in case of need in Sweden.

FRANCE

382. "Circulaire du 14 Septembre 1939. A MM. les préfets, à MM. les inspecteurs d'académie relative a l'organisation de l'enseignement du 1^{er} degré pour les enfants évacués," *L'Enseignement public*, CXXII (Octobre, 1939), 189-92.

A circular of directions on the handling of the instruction for primary evacuated children.

383. "Le Collège de Neauphle," *L'Information universitaire*, No. 946 (28 Octobre, 1939), 1.

A description of one of the centers of secondary studies set up in the environs of Paris to take care of the students from the closed lycées of the city.

384. A CORRESPONDENT. "French Children in War-Time: The Evacuation Scheme," *Times Educational Supplement* (London), No. 1277 (October 21, 1939), p. 412

Tells of the French evacuation scheme and offers an opportunity for comparison with the plan followed in England

385. HACHEL, "Rentrée de guerre," *L'Information universitaire*, No. 942 (Septembre, 1939), 1, 8.

Discusses what the French schools must do in the war, with special stress on technical education and the need for skilled workers in factories and shops. This number of *L'Information* contains also the official communiques relating to education up to September 21, 1939.

386. HACHEL. "La Jeunesse et la guerre," *L'Information universitaire*, No. 944 (21 Octobre, 1939), 1.

A plea that the schools be kept open during the war and the children protected as much as possible from bad influences,

387. HACHEL "Science sans conscience," *L'Information universitaire*, No. 952 (25 Novembre, 1939), 1, 6.
A comparison of the German and the French philosophies of education.
388. "Instruction sur l'organisation des études du second degré pendant la période des hostilités," *L'Information universitaire*, No. 951 (18 Novembre, 1939), 3.
Circular of November 16, 1939, giving instructions concerning secondary education during the war.
389. LAPIERRE, G. "Pour un enseignement post-scolaire obligatoire," *L'Ecole libératrice*, 11^e année (23 Décembre, 1939), 145, 146.
Calls attention to those adolescents who are not attending school and are not engaged in any useful occupation and points out what is being done and what should be done for them.
390. LAVERTY, G. "Le Budget de l'éducation nationale pour 1940," *L'Ecole et la vie*, 23^e année (23 Décembre, 1939), 84, 85.
A report of the discussions in the Chamber of Deputies on December 7, 1939, when the budget for national education in 1940 was voted.
391. "La Rentrée dans l'enseignement du second degré," *L'Information universitaire*, No. 943 (7-14 Octobre, 1939), 1, 5.
Tells of the difficulties in opening the secondary schools and how they were met.
392. ROUSSY, GUSTAVE. "Rentrée de guerre," *L'Enseignement public*, CXXII (Decembre, 1939), 299-304.
The address of the rector of the Academy of Paris at the opening of the university in the autumn of 1939. An excellent expression of the spirit that animates the universities of France.
393. SOLEIL, JOSEPH. *Le Livre des instituteurs*. Paris: Librairie H. Le Soudier, 1940. Pp 350.
Characterized by the author as a complete treatise on the duties and rights of the teaching corps, this volume is a compilation of the laws and regulations governing education in France.

GERMANY

394. "Hochschulen, die im 1. Wintertrimester 1939/40 geöffnet sind—Einführung von Trimestern—Arbeitsdienst, Ausgleichsdienst," *Studium und Beruf*, IX-X (September-Oktober, 1939), 131-32.
Tells of some changes made in higher education because of war conditions.
395. LINDEGREN, ALINA M. *Education in Germany* United States Office of Education Bulletin No. 15, 1938. Pp. 146.
A factual account of education in Germany based on data gathered during visits to that country in 1935 and 1936 and, after that, from documentation to the summer of 1938. The bulletin contains material of value for collegiate

registrars and for teachers and students of comparative education and of social studies

396. POWELL, P. H. "The Nazi Way with Youth," *Listener*, XXII (December 28, 1939), 1271-72.

Impressions gained by an Englishman who during the past ten years has studied and taught in Germany.

397. REICHSSTELLE FÜR SCHULWESEN BERLIN. *Wegweiser durch das höhere Schulwesen des Deutschen Reiches, Schuljahr 1937*. 3. Jahrgang Berlin: Weidmannsche Verlagsbuchhandlung, 1938. Pp. 220.

A statistical survey of secondary education in Germany for the school year ending about May 15, 1937.

398. REICHSSTELLE FÜR SCHULWESEN BERLIN. *Wegweiser durch das mittlere Schulwesen des Deutschen Reiches, Schuljahr 1937*. Leipzig: Verlag von Julius Beltz, 1938. Pp. 128.

A statistical survey of middle-school education in Germany for the school year 1937.

399. "Studium für das wissenschaftliche und das künstlerische Lehramt an höheren Schulen," *Deutsche Wissenschaft Erziehung und Volksbildung*, XXIII (5 Dezember, 1939), 578.

A ministerial decree stating that because of war conditions study in preparation for secondary-school teaching will be shortened by one year through setting aside, temporarily, the requirement for one year of attendance at a high school for the education of elementary-school teachers before admission to a university.

400. SWIFT, FLETCHER HARPER. *The Financing of Institutions of Public Instruction in Germany, 1927-1937*. European Policies of Financing Public Educational Institutions, IV. University of California Publications in Education, Vol VIII, No. 4. Berkeley, California: University of California Press, 1939. Pp xviii+(345-694).

One of a series of studies dealing with policies of financing education abroad. The other studies published deal with the policies of France, Czechoslovakia, Austria, and England and Wales.

401. ZSCHINTZSCH. "Einsatz der Unterrichtsfilm- und Bildorganisation für Zwecke der Wehrmacht," *Deutsche Wissenschaft Erziehung und Volksbildung*, XVIII (20 September, 1939), 477-78.

Gives the conditions of an agreement between the Ministry of Education and the High Command of the Army for placing the organization for educational films and pictures at the disposal of the military authorities and yet retaining it as in times of peace for the use of the schools.

HAITI

- 402 DARTIGUE, MAURICE. *L'Enseignement en Haïti (1804-1938)*. Service National de la Production Agricole et de l'Enseignement Rural, Bulletin No. 14. Port-au-Prince: Imprimerie de l'Etat, 1939. Pp. 54.

Begins with a historical résumé for 1804 to 1915. Then follow chapters on education during the American occupation (1915-31), the organization of education after the occupation (1931-34), and changes and reforms of 1935-38. The review closes with brief, pointed conclusions for bettering education in Haiti.

- 403 SERVICE NATIONAL DE LA PRODUCTION AGRICOLE ET DE L'ENSEIGNEMENT RURAL. *Rapport annuel: exercices 1936-37 et 1937-38*. Bulletin No. 15. Port-au-Prince: Imprimerie de l'Etat, 1939. Pp. 152.

A report on agricultural extension and rural education in Haiti.

INDIA

404. EDUCATION AND PUBLIC HEALTH DEPARTMENT. *Report on Public Instruction in the Madras Presidency for the Year 1937-38*, Vol. I. Madras: Government Press, 1939. Pp. 74.

The population of the Madras Presidency is more than forty-four million, of whom more than three million are enrolled in various types of educational institutions. The annual report on this fairly large school system is important and interesting.

IRAN

405. MINISTRY OF EDUCATION, DIVISION OF ADULT EDUCATION. *Adult Education in Iran, 1938-1939*. Teheran: Impr. Madjless, 1938. Pp. 64.

A resolution of June, 1936, to introduce adult education throughout Iran was first put into effect by the Ministry of Education in September of that year. This little volume is a report on the rather remarkable progress made in the school years 1936-37, 1937-38, and 1938-39.

LATVIA

406. URCH, R. O. G. *Latvia, Country and People*. London: George Allen & Unwin, Ltd., 1939. Pp. 280.

Contains a chapter describing education in Latvia.

407. VITOLS, HUGO "Le Développement de la vie culturelle en Lettonie," *Lettonie, vingt années d'indépendance*. Ouvrage publié sous la direction de R. Bērziņš-Valdēss et S. Vidbergs. Riga: "Pagalms," 1938. Pp. 256.

The author describes, for the past twenty years of its national life, Latvia's progress in education and in several other phases of the country's cultural development.

NORWAY

408. "Krisa skaper vanskar for skulen," *Norsk skuleblad*, Nr. 38 (23 September, 1939), 753-54.

An account of efforts made by the Department of Education to keep the schools up to standard in spite of the shortage of teachers caused by summons to military service and the effect of the rationing of gasoline on the transportation of school children.

409. SUNDE, A., ET AL. "Lærernes lønnsforhold under nøytralitetsvakt," *Norsk skuleblad*, Nr. 45 (11 November, 1939), 887; Nr. 48 (2 Desember, 1939), 953-54; Nr. 4 (27 Januar, 1940), 54.

Regulations issued by the Department of Education concerning the salary of elementary-school teachers called to service for neutrality guard.

SCOTLAND

410. SCOTTISH EDUCATION DEPARTMENT. *Report of the Committee of Council on Education in Scotland for the Year 1938, with Summary Statistics for Scotland for the Year 1937-38*. Edinburgh: His Majesty's Stationery Office, 1939. Pp. 106.

The latest official annual report on education in Scotland.

411. SCOTTISH EDUCATION DEPARTMENT. *The Teaching Profession in Scotland*. Educational Pamphlets, No. 3. Edinburgh: His Majesty's Stationery Office, 1939. Pp. 20.

The third of a series intended to describe simply and clearly different phases of education in Scotland. No. 1 tells of the administration of public education in Scotland; No. 2, of school buildings and their equipment.

412. WADE, NEWMAN A. *Post-primary Education in the Primary Schools of Scotland 1872-1936*. London: University of London Press, Ltd., 1939. Pp. xvi+276.

Mainly a study of the development of the aims, curriculums, and the organization and staffing of post-primary schools for pupils from twelve to fifteen years of age conducted in the primary school code of Scotland. A valuable work.

SPAIN

413. CASTILLEJO, JOSÉ. *Education and Revolution in Spain*. University of London Institute of Education Studies and Reports, No. 12. London: Oxford University Press, 1937. Pp. 26.

Three lectures delivered to the Institute by a professor in the Faculty of Law of the University of Madrid.

414. OSÉS, HIGINIO LÉON, ET AL. *La Nueva legislación de enseñanza media*. Pamplona: Editorial García Enciso, 1939. Pp. 222.

One of the first of the educational publications to come from Spain since the revolution, this volume was compiled by staff members of the Ministry of National Education to explain the law of September 20, 1938, governing secondary education.

SWEDEN

415. "Evakueringsplan för born i svenske byar," *Norsk skuleblad*, Nr. 37 (16 September, 1939), 746.
Summaries of instructions issued by the Sweden Board of Education to elementary-school inspectors for keeping up schools when teachers are summoned for neutrality guard and of instructions issued for the evacuation of children in case of war or the danger of war
416. KÖKERITZ, GUSTAV H. *Valet av levnadsbana*. Anvisningar och råd samlade och bearbetade. Stockholm: Albert Bonniers Förlag, 1938. Pp. 180.
A practical guide in vocational education designed to meet the needs of young people who have completed (1) secondary-school studies or (2) the lower level of the secondary school.
417. "Lärares lön under militärtjänst," *Svensk lärartidning*, Nr. 36 (9 September, 1939), 1028; Nr. 37 (16 September, 1939), 1055-56; Nr. 39 (30 September, 1939), 1114-15; Nr. 40 (7 Oktober, 1939), 1139-40; Nr. 44 (4 November, 1939), 1256; Nr. 45 (11 November, 1939), 1282, 1301-4; Nr. 48 (2 December, 1939), 1383-84; Nr. 50 (16 December, 1939), 1435-36.
A series of eight discussions on salaries of teachers in military service.
418. "Lön vid förstärkt försvarsberedskap," *Folkskollärarnas tidning*, Nr. 48 (2 December, 1939), 7; Nr. 50 (16 December, 1939), 1-4.
Two articles concerning the salary of elementary-school teachers summoned to strengthen the national defense and the salary of substitute teachers from the ranks of teachers retired on pension.
419. "Skola i krig eller krigsfara," *Folkskollärarnas tidning*, Nr. 46 (18 November, 1939), 12.
A royal decree governing elementary and secondary schools in case of war or danger of war.
420. "Utrymningsplan för skolorna," *Svensk lärartidning*, Nr. 36 (9 September, 1939), 1032; Nr. 37 (16 September, 1939), 1058-59; Nr. 38 (23 September, 1939), 1083-84, 1088-89; Nr. 40 (7 Oktober, 1939), 1140-42; Nr. 41 (14 Oktober, 1939), 1168; Nr. 42 (21 Oktober, 1939), 1194, 1196; Nr. 43 (28 Oktober, 1939), 1224-25; Nr. 46 (18 November, 1939), 1312-13; Nr. 47 (25 November, 1939), 1345; Nr. 50 (16 December, 1939), 1437
A series of discussions and articles on the plans for the evacuation of school children in case of war or danger of war
421. "Världskatastrofen och skolan," *Svensk lärartidning*, Nr. 36 (9 September, 1939), 1027, 1033; Nr. 37 (16 September, 1939), 1062-65; Nr. 39 (30 September, 1939), 1113-14; Nr. 40 (7 Oktober, 1939), 1138; Nr. 46 (18 November, 1939), 1310

A series of five articles showing the efforts made by Sweden to keep up the standard of its schools in time of war. The final article gives the royal decree issued November 3, 1939, on instruction during war and danger of war.

422. WAGNSSON, RUDEN, ET AL. *Folkskolestadgan och andra förhållningar rörande folkundervisning och folkbildning*. Stockholm: Svensk Lärartidnings Förlag, 1938. Pp. 608.

The elementary-school statute and other regulations concerning instruction in the elementary school.

SWITZERLAND

423. "Im Dienste des Landes," *Schweizerische Lehrerzeitung*, No. 36 (8 September, 1939), 717-18.

The article points out some of the responsibilities of the teacher in time of war.

424. JACCARD, LOUIS. *L'Instruction publique en Suisse annuaire 1939*. Publié sous les auspices de la conférence internationale des chefs des départements de l'instruction publique de la Suisse romande avec l'appui de la confédération. 30^e année. Lausanne: Librairie Payot & Cie., 1939. Pp. 192.

A survey of public education in Switzerland.

425. "Mobilisation und Schule," *Schweizerische Lehrerzeitung*, Nr. 40 (6 Oktober, 1939), 788-89; Nr. 41 (13 Oktober, 1939), 806; Nr. 42 (20 Oktober, 1939), 820-21; Nr. 44 (3 November, 1939), 851-52; Nr. 45 (10 November, 1939), 868-69; Nr. 48 (1 Dezember, 1939), 923-25; Nr. 50 (15 Dezember, 1939), 966.

The articles deal with the military service, salary, and conditions of exemption from military service of teachers in Switzerland and some of its cantons during the period of mobilization.

426. "Mobilisation und Schulorganisation," *Schweizerische Lehrerzeitung*, No. 36 (8 September, 1939), 722-23.

The need of keeping up the school organization in spite of the shortage of teachers due to mobilization and some suggestions as to how it may be done

UNION OF SOUTH AFRICA

427. COOK, P. A. W. *The Transvaal Native Teacher*. South African Council for Educational and Social Research Series, No. 11. Pretoria: South African Council for Educational and Social Research, 1939. Pp. 138.

The study includes such items as selection, training, and qualifications of teachers; age, length of service, and wastage; economic position; geographical and tribal origin; and home language.

428. FICK, M. LAURENCE. *The Educability of the South African Native*. South African Council for Educational and Social Research Series, No. 8. Pretoria: South African Council for Educational and Social Research, 1939. Pp. 56.

The author concludes that around the ages of thirteen and fourteen native children are from four to five years inferior to European children in educability as gauged by the results of intelligence tests. His conclusion may not be entirely valid, but it seems clear that the native is not educable in the same way as the European.

429. FICK, M. LAURENCE. *An Individual Scale of General Intelligence for South Africa*. South African Council for Educational and Social Research Series, No. 7. Pretoria: South African Council for Educational and Social Research, 1939. Pp. 56.

The author adds new test items for ages above thirteen to the official mental-hygiene individual scale first standardized in 1927 and useful for ages seven to thirteen.

430. SERFONTEIN, V. *Cost of Primary and Secondary Education*. South African Council for Educational and Social Research Series, No. 9. Pretoria: South African Council for Educational and Social Research, 1939. Pp. 34.

The official methods of accounting in the Union do not make a clear distinction between the costs of primary and of secondary education for the European population. The author attempts to make such distinction and work out the per pupil costs at each level.

UNION OF SOVIET SOCIALIST REPUBLICS

431. SIMON, SIR ERNEST D., and OTHERS. *Moscow in the Making*. London: Longmans, Green & Co., 1937. Pp. 254.

The chapter on education was written by Lady Simon, mainly from the administrative point of view. Some comparisons are drawn with education in Manchester. Her account of the fall of the "pedologues" is especially important.

YUGOSLAVIA

432. TUROSIENSKI, SEVERIN K. *Education in Yugoslavia*. United States Office of Education Bulletin No. 6, 1939. Pp. viii+146.

A detailed description of education in Yugoslavia made from some months of investigation of the schools in the country itself.

Educational Writings



REVIEWS AND BOOK NOTES

EDUCATION OF PARENTS AND CHILDREN THROUGH THE PRESCHOOL.—Woven into the fabric of the Broadoaks Preschool are the four threads which become the theme of a book¹ written by its director. First, the whole child must be considered; second, mental hygiene must have its place; third, the school and home must be co-ordinated; and, fourth, the early years are very important and must be wisely guided.

On every page there is a clear and interesting picture of an educational institution that not only sets up an admirable program for the training of young children but also reaches out to bring parents, both mothers and *fathers*, into its circle by giving them specific responsibilities in the school program and opportunities to attend study or discussion groups and individual conferences on the child's educational progress. Baruch emphasizes, much as did Froebel (now so little read), what the school can do for parents. Froebel's conception failed because his disciples formalized the kindergarten and separated it from the parents' associations which were an integral part of his plan, but Baruch skillfully demonstrates the procedures through which parent and child education can be integrated.

After a brief and vivid description of the preschool and a discussion of why parents send their children to it, the book moves on to Part II entitled "Parents at School." Here is given a general view of the parent-education program, and a specimen group discussion of parents is presented in detail. After showing that parents are people, the author gives illustrative transcriptions of individual conferences with them. There follow discussions of school records as instruments of parent education, devices for parents' participation, and the organization of a co-operative nursery school.

In Part III, "Children at School," the main section of the book, a detailed description of the school program is given, with many illustrations and much practical advice and help for teachers. Graphic chapter headings give a clue to the contents. They are in order: "The Stronger the Body," "These Emotions," "Learning To Live with Other Children," "When Problems Enter," "Discovering the World About," "Discovering the Ways of Man," "Discovering Words," "When Children's Words Make Poems," "Forming Friendships with Books and Stories," "Music in the Air," and "Artist and Artisan." Although all these chap-

¹ Dorothy Walter Baruch, *Parents and Children Go to School: Adventuring in Nursery School and Kindergarten*. Chicago: Scott, Foresman & Co., 1939. Pp xiv+504. \$3.00.

ters have merit, the high point is reached in those on language, poetry, and stories.

Part IV, "Implications of the Preschool," discusses the value of the preschool in terms of the backgrounds given the child for his later education, the techniques of skilful teacher guidance, and the contribution that knowledge of early childhood can make to prospective parents and teachers.

An "Afterword" presents data about the Broadoaks Preschool, its setup and children, with some discussion of the broader aspects of preschool education in the United States. Three appendixes contain the record forms used at Broadoaks and cleverly annotated and classified lists of stories and poems and of songs and musical selections for young children. At the end of each chapter there is a well-selected, comprehensive, and briefly annotated bibliography.

The book carries out its function by giving complete descriptions of the procedures used at Broadoaks, with transcriptions of interviews, children's reactions, teachers' suggestions, etc., interwoven with references and comments on the technical literature. The presentation is replete with concrete illustrations and is well worth reading, not only for its content, but also for its style. Much of the material is presented by indirection and example in a narrative and descriptive style that may make it difficult for the student to generalize and formulate the principles involved. Because of the excellent summaries given of several chapters, one wishes that the author, who is very skilful when she wishes to bring order out of chaos, had prepared similar summaries for all chapters. Statistical and normative data are strikingly absent. On the other hand, there is frequent quotation of authority, often in the form of obvious platitudes, that might well have been replaced by more concrete material and data.

The typography and the makeup, which in general are excellent, are spoiled for me by the practice of combining italics with roman capitals in the section headings, so that every heading suggests that it was composed by a drunken printer.

This book should find many uses. The general reader will find it more appealing than the conventional textbook. Parents, parent educators, and experienced teachers will gain new insight and practical help from it. Students and teachers in training will find it a good textbook and a stimulating reference book.

JOHN E. ANDERSON

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VITAL RURAL EDUCATION.—In recent years modern schools have attempted more and more to become community-centered schools. They have endeavored, through an extension of the curriculum, to include the systematic utilization of community resources by pupils and the utilization of school facilities, materials, and personnel by adults. A notable experiment was conducted by Miss Clapp and her associates in two rural communities. Out of the experiment has come a

handbook¹ of rural progressive education. It contains detailed descriptions of school projects and community projects sponsored by the school. The accounts are derived from experiences in a small elementary school, Ballard Memorial School, in Kentucky, and in nursery, elementary, and secondary schools in a homestead community, Arthurdale, West Virginia.

The volume is one of the most complete documents of vitalized rural education now available. Despite a choppy and piecemeal recital of the Ballard School experiment, the reader gains a comprehensive idea about the introduction of an activity program in a traditional rural school. He gets a kaleidoscopic picture of a rural community health project as influenced by the work of a progressive school; of the school as a recreational center for the community; of the use of local resources, including traditions, as a basis for the elementary-school curriculum as well as for adult education. As Miss Clapp says:

If social services are in part the self-initiated activity of a school, they are also in part the outgrowth of the school's relations with the community. From the identification of the teachers and the principal with the life and problems and interests of the community comes the intimate knowledge of people and conditions that is needed to direct social work intelligently, and that can give it relevancy and significance and effectiveness [p. 64].

The major part of the volume is devoted to a résumé of activities in the Arthurdale schools, in which they are pictured as educational and social forces in a homestead community. The author, unfortunately perhaps, provides little philosophical interpretation or critical comment, educational or sociological, regarding the activities. The activities, as recorded, are left largely to speak for themselves.

The curriculum of the Arthurdale schools included all experiences which boys, girls, and adults had under the guidance of the school. These experiences included physical care, dental work, and recreation and enjoyment, such as square dances, music festivals, etc. They included night school for the older boys and girls, a farm co-operative, a library, and men's and women's clubs. The course of study of the elementary school proper comprised units of work on farming in Grade I, building the village of Arthurdale in Grade II, Indian life in Grade III, and Colonial life and similar projects in the upper elementary grades. The nursery school was a source of education, especially for parents, regarding problems of child care and health. The cultural resources of Arthurdale which were used for the older children and adults included square dancing, fiddle-making, ballads, music festivals, quilt-making, furniture-making, drama, and the school newspaper.

The high-school program, although it was vitalized to the extent of using community resources within broad fields of conventional subject matter, did not indicate a wide use of present-day social problems that have not only local but

¹ Elsie Ripley Clapp, *Community Schools in Action*. New York: Viking Press, 1939. Pp. xviii+430. \$3.75.

nation-wide scope. Illustrations of such socio-economic problems are those of race relations, labor, unemployment, and technological trends.

This volume is a valuable handbook on the use of rural community resources by modern schools. It delineates the relation of adults in such a community to the total educational program. It gives a detailed description of the development of material and methods for a comprehensive curriculum of in-school and out-of-school activities. It provides examples of utilization of local cultural materials and resources. Most important, it emphasizes and illustrates frequently the democratic method of living in school and community.

These values are diminished slightly by the lack of clear exposition of educational and social philosophy and by a failure to develop a more progressive social education in the high school.

It is an educational rather than a sociological document. As John Dewey has said in the Foreword to the volume:

Administrators and teachers will add to their own education by becoming acquainted with the work of these schools, and thereby the larger educative process be promoted [p. vii].

A great deal is now said about the social function of the schools, more is said than is done. In this book we have an account of something actually done and of how it was done. Perhaps the first lesson it teaches us is that schools function socially only when they function in a community for community purposes, and communities are local, present, and close by, while "society" at large is something vaguely in the distance [pp. vii-viii].

Urban as well as rural educators may well read this book to gain new insights about the relation of vital education to community resources.

J. WAYNE WRIGHTSTONE

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VALUABLE GUIDANCE FOR THE ADMINISTRATOR ON PROBLEMS OF NON-INSTRUCTIONAL CHARACTER.—The personnel of any large educational system includes many employees who are not directly concerned with instruction. Among these are to be found persons bearing such titles as business manager, engineer, janitor, clerk, attendance officer, storekeeper, yardman, building and grounds supervisor, bookkeeper, supply officer, nurse, cook, lunchroom director, window-washer, night watchman, and automobile traffic officer. Theorists in school administration have devoted little space in their writings to the problems related to the administration of nonteaching personnel, which, in cities at least, averages one-seventh of all employees of the school system.

School administrators will, therefore, be interested in a recent report¹ of a carefully executed research which bears directly on the administration of the

¹ Hazel Davis, *Personnel Administration in Three Non-teaching Services of the Public Schools*. Teachers College Contributions to Education, No. 784. New York: Teachers College, Columbia University, 1939. Pp. x+324. \$2.50.

personnel in three nonteaching fields: attendance, nursing, and secretarial workers. The study is devoted primarily to determining "whether or not approved personnel procedures in administration tend to be associated with evidences of adequate performances in the nonteaching services" (p. 7). The phrases "approved personnel procedures" and "evidences of adequate performance" used in this statement of purpose are definitized, as required by tested research procedure. Data were collected from twelve selected cities. The method employed—the survey method—included the collection of printed and mimeographed materials, the use of check lists, the interviewing of selected persons, and the observing of certain working operations. Relative appraisal of performance was obtained by registering judgments on itemized aspects. Such ratings were refined to three degrees only: high, medium, and low.

Little will be gained by dwelling either on the details of the methods used in the research or on the results obtained. Inherent in the survey method are faults about which all are aware and which simply have to be accepted if research in certain areas is to go on. Miss Davis has reduced these faults to a minimum, and, where she was forced to use her own judgment, she shows insights leading to the belief that the judgments are those of an expert and not merely the opinions of an amateur.

The most meritorious contribution of this study, in my opinion, is the helpful and sound information given in chapter vi and the subsequent chapters of the study on the administering of the nonteaching personnel in public schools. Guidance to the interested administrator is afforded under such headings as planning and leadership, development of personnel resources, salary scheduling, selection, terms of employment, distribution of personnel, and working conditions. It may be noted that these topics are rather comprehensive for a single research.

Readers interested in research techniques in administration and in the possibility of improving them can use this study as a basis for analysis of the survey method of research. Readers more interested in getting help on nonteaching personnel problems can forget that this book reports a research project and can read profitably from chapter vi on to the end of the book. On the research side, the efforts are praiseworthy. It may be granted that administrative research always encounters certain difficulties and that this study is not an exception. On the side of its contribution to administrative theory, it ranks far above most studies of its kind. It is more penetrating than some, more analytical than others. It gives evidence of having been written by an investigator who understood well what she undertook to do.

J. M. HUGHES

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STORIES FOR YOUNG READERS.—Only occasionally does the title of a book indicate its spirit and central purpose, but here is one of those fortunate, though all too rare, occasions. There is a warmth in the expression "let's"; there is a

warmth and challenge in *Let's Read!* I often listen to a broadcast of chatty book reviews under the caption "Let's Read a Book." There is something about that caption which enveigles me not only into listening to the reviews but into actually bestirring myself to read a book. As this turn of phrase influences even busy adults, it may prove still more stimulating to those young people who make up the happy communities of the junior high schools.

Pupils in junior high schools, or those in the seventh and the eighth years of other school organizations, are thoroughly social beings even though they may not as yet have attained that high degree of socialization which is assumed to be such a desirable goal in modern education. Boys and girls approaching or entering the early teens can't help but say, "Let's! Let us do this! Let us do that!" In the rush of the young blood and buoyant spirits, words are cut short, phrases are abbreviated, and "let's" is the spirit of the youthful times.

The four authors of *Let's Read!* have succeeded in taking into their confidence any young reader who may turn to this golden book—and it is truly a golden book, in its unusual gilt cover as well as in the charming stories and sketches which go to make up its contents. A sticker put in by the publisher announces: "The cloth used for the binding of this book is sturdy, cleanable, water-resistant, and vermin-proof. It may be washed with soap and water." There is nothing pleasant about the word "vermin," and yet there is a clean satisfaction in the implied sanitation. The volume is attractive, with nothing about it to suggest the cold, cheap quality of an oilcloth. It is a clean, lovely book of gold.

The young reader is at once introduced to the nature, purpose, and process of the making of the book. Nothing is being "put over." He is made to feel that he is a co-partner with the authors; and, after all, the reader of a book is just as important as the author. Who wants to write a book which will have no readers? In short, purposeful authorship finds its great reward in appreciative readers—and many of them.

This book starts out with timely suggestions and directions for reading it. The pupil opening the book is like a boy unpacking a new air rifle and noting the directions for loading, shooting, and caring for it so that it may long be a source of interest and amusement.

The first section comes alive with a fine collection of dog tales, nicely sprinkled and interspersed with illustrations of many canine friends in happy moods and poses. There is even a section on "Educating Your Dog" and a long paragraph of "doggy words." The text gives good advice on how to treat a dog (without rubbing in the moral) and also some pertinent directions on giving a dog a chance.

Lest you think this review is going to the dogs, and to the dogs alone,

* Holland Roberts, Helen Rand, George Murphy, and Nellie Appy, *Let's Read!* II. Growing Up in Reading. New York. Henry Holt & Co., 1939. Pp. xiv+536. \$1.28.

"let's" move into the section on "How You Play the Game" and on into "Animal Ways and Reptile Days." Whether or not that rhyme was intended, I cannot say, but it and the stories are there. We then take a flier into Section IV, "It's about Flying"; pick up a few "Jobs and Hobbies" farther on; and then drop into the library. "How To Use the Library" tells us "Where to look in the library" and suggests the readiness of the faithful *Readers' Guide* to help one over difficult spots. The volume comes to a timely end in "Adventurers Roam the World."

Many of us cannot do at firsthand all the venturing and adventuring that we might like, but where is the book-lover who has not had more thrilling adventures than he can shake a stick at anyway? A little girl curled up in a big chair or her brother sprawled out on the floor may go adventuring with as many thrills as will ever come to Admiral Byrd. *Let's Read!* has been prepared to meet some of these needs and, because of the keen insight and versatility of its authors, should fulfil its mission in life with more than the ordinary degree of success. It's worth looking into.

CLYDE B. MOORE

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MICKEY MOUSE AND DONALD DUCK IN CHILDREN'S LITERATURE.—Four story-books for young children which were illustrated by the Walt Disney Studio¹ have recently been published. The stories in these books, according to the advertisement of the publishers, have been written by well-known authors of children's books especially for school use.

The following brief summary of the content of one of these books is typical of three of them: As Mickey is wandering about, he sees a house being built. He is interested in it and talks with the workmen about it. After a bit he decides to live in it, but it will be too big for him alone, so he goes after Minnie Mouse. He asks her to come with him to see something. When they get to the house, Minnie is much disappointed because the thing she wants most is a crocodile. Mickey promises to get her a crocodile if she will come and live in the house. She promises that she will come if he will let her Aunt Matilda and the twins come too. It takes a good deal of coaxing but crabbed old Aunt Matilda is finally persuaded, and they all move in long before the house is finished. They have many adventures in getting settled. The twins, Monty and Morty, find some rock wool about and put some of it into Aunt Matilda's bed. They escape punishment for this mischief because Aunt Matilda is induced to believe that the rock wool has fallen from the ceiling. After this, the painter falls and makes a terrible mess with sticky varnish. Then the oil burner gives them all a scare

¹ Walt Disney Story Books: *Donald Duck and His Friends* by Jean Ayer, pp. 102; *Little Pig's Picnic and Other Stories* by Margaret Wise Brown, pp. 102; *Mickey Never Fails* by Robin Palmer, pp. 102; *School Days in Disneyville* by Caroline D. Emerson, pp. 102. Boston: D. C. Heath & Co., 1939. \$0.68 each.

because it growls like bears and tigers when it first starts up. They think these animals have come into their house. Mickey pretends to be brave, and he goes to the furnace-room, where he finds that the noise is only the sound of the furnace and not animals at all. In the end Mickey makes Minnie very happy by giving her a crocodile. She thinks he is very brave because he has captured and tamed this fierce beast. In reality he has found a tame crocodile in a stream. This is typical of Mickey's behavior throughout the book. He is a bluffer; he makes a grand impression because of his good fortune, he never fails because of his luck.

The fourth book in the series contains ten short stories instead of one long one. Several of these are well-known nursery tales in new versions. The ugly duckling, after several adventures, is recognized by a family of swans and is adopted by the mother-swan, who shelters him under her wing; the grasshopper earns his living in the ant's house by playing his fiddle for the ants to dance; and the rabbit who wanted red wings in so many children's books is here a mouse who wants to fly.

A cursory examination of the illustrations and of the text of these books indicates that the content is intended to be nonsense material—and there is a place in children's literature for nonsense stories and poems. Lear, Carroll, Morley, and Milne have won such a place for their writings. These authors have given to their nonsense tales a style in presentation that has made them interesting to adults as well as to children, but Donald Duck and Mickey Mouse have not been fortunate in their presentation in book form. In the moving pictures the Disney Studios have made Mickey and Donald and their many friends beloved characters to children, but the originality and sparkle evident in the moving pictures are missing in these books. Careful reading demonstrates that the illustrations are much better than the text. Perhaps the effort to control the vocabulary of the text has restricted the authors and prevented them from presenting these characters as the jolly bits of pure nonsense that they are.

The format of the books is excellent. The paper is good; the print is large and clear; the pages are uncrowded, and the text is not too full.

ADA R. POLKINGHORNE

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CHANGES IN JUNIOR HIGH SCHOOL MATHEMATICS —The time was when all pupils in the elementary schools, the academies, and the colleges studied mathematics. The prevailing psychological doctrine was the doctrine of formal discipline with a concurrent belief in a large measure of transfer of training. The subject matter of textbooks was organized with strict regard for logical development, and there was little concern about applications or learners' interests.

With the educational reforms of recent years has come a disposition to challenge the value of the study of mathematics beyond the fundamentals of arith-

metic and a few of the more common applications. In an effort to meet the challenge, textbook authors have tried to eliminate materials of little or no social value, to show the role played in ordinary life affairs by the materials that they present, to develop a better gradation of the more difficult topics, and to incorporate suggestions which are designed to facilitate learning. A series of junior high school textbooks¹ has appeared in which an effort has been made to include these and other improvements.

Unique features of this series, as compared with most other textbooks in junior high school mathematics, are the reduction in the amount of algebra and the greater emphasis on the applications of arithmetic. Except for some attention to formulas and a chapter of thirteen pages on positive and negative numbers (the last chapter in the book), there is no algebra in Book II. Book III has a forty-page chapter on signed numbers and monomials, a twenty-four-page chapter on polynomials, a sixteen-page chapter on equations and problems, a twenty-four-page chapter on equations of the first degree, a thirty-page chapter on factoring and quadratics, and an eighteen-page chapter on algebraic fractions. Thus 152 of the book's 438 pages (exclusive of the Index) are devoted to algebra. The remaining 286 pages are given over to arithmetic, intuitive geometry, and elementary concepts of numerical trigonometry. The reviewer was pleased with the organization of Book III, particularly with the arithmetic reviews and the deferred attention to some of the applications of arithmetic, but whether those responsible for making courses of study and for teaching mathematics in the junior high school will agree that sufficient attention has been given to algebra remains to be seen.

In some places the development of terms and concepts is very rapid. This rapid development is particularly noticeable in the first six pages of Book I, where the following terms are used: "circle," "cylinder," "cylindrical," "horizontal," "vertical," "cone," "conical," "straight line," "parallel line," "angle," "plane," "spherical," "concentric," "rectangle," "right angle," "trapezoid," "rectangular," "solid," "triangle," "octagon," "scale drawing," "square," and "perimeter." Since many, if not most, of these terms probably will be unknown to the pupils who use the book, it seems that too many new terms are presented in brief space for those who approach mathematics with some misgiving as to their ability to master the subject.

A good feature of the books is the fact that the discussion of many topics is accompanied by exercises designed to inform the pupils whether they are in need of further information or further development of skills. Notes refer to the pages on which practice and remedial materials may be found.

In general the problems which are given for solution are drawn from real affairs. Many reflect an acquaintance with matters current at the time the

¹ Walter W. Hart and Lora D. Jahn, *Mathematics in Action*: Book I, pp. viii+344, \$0.88, Book II, pp. x+374, \$0.96; Book III, pp. vi+442, \$1.28. Boston: D. C. Heath & Co., 1939 and 1940.

manuscript was prepared. In some instances, however, the problems are unreal. For example, those involving the use of the third case of percentage (Book II, pp. 135-36) are, to a considerable extent, of the "answer-known" type—a common fault of such percentage problems as they occur in textbooks. On page 6 of the same volume a problem states that the Ohio River flood of 1937 cost about \$385,000,000 and asks for the average cost per person, correct to cents, to the people of the United States if the population was 128,000,000. Since both the total cost and the population are given in millions, the average cost per person to the nearest cent cannot be determined.

Apparently, practice exercises and progress tests have not been constructed with sufficient regard for the distribution of practice on the combinations involved. The reviewer has analyzed several pages of such material and has found the distribution to be ragged. For example, page 334 of Book I contains forty subtraction examples having five-digit numbers. If it be assumed that the decomposition method of subtraction is used, 9 is found to be taken from each of the numbers from 9 to 18, inclusive, but the number of occurrences of each of these combinations ranges from one to six.

In general teachers will find in these books a large amount of very useful material. Although sometimes the presentation is formal and a little too rigorous, more often it is interesting and obviously related to real affairs. The books are a worth-while addition to the rapidly increasing number of textbooks in this field. They will stimulate many teachers to do better teaching and some other authors to improve their books.

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A SOCIAL-STUDIES READER ON INDUSTRIAL UNITED STATES.—Book II of this social-studies series¹ continues the picture of "men at work to make America a better place in which to live" (p. vi) and is devoted to industrial United States. The book is organized by geographic sections, but important industries common to more than one region are described only once. Besides such expected manufactures as textiles, steel, shoes, and paper, space is given to more recent developments, such as manufacturing plastics, quick freezing of foods, building airplanes, making board and paper from southern pine, and making motion pictures.

Each main section of the book is given over to the travel and sight-seeing experiences of a different family group, usually a boy and a girl with one or both parents. The adults guide the observations and arrange situations where firsthand information is obtained by actual visits to mills and factories. The vigorous conversational style carries the reader swiftly and entertainingly

¹ Walter B. Pitkin and Harold F. Hughes, *Seeing Our Country*, Book II. New York: Macmillan Co., 1939. Pp. xii+384. \$1.60.

along. As is unavoidable in such an approach to subject matter, there are many stretches in the book where little of factual interest is contributed to the general theme while the characters are being maneuvered into a position to learn.

Parts of industrial living and processes which children can understand are presented in clear, simple language. A certain amount of technical vocabulary is, of necessity, introduced. Through concrete examples and observations of the individuals in the story, the volume presents an admirable background of some phases of the complicated industrial-social organization of modern America. The interdependence of workers in different occupations, the place of scientific research, and the constantly changing adjustment of living conditions and industrial practices to changing environment are well brought out.

Doubtless many teachers will wish to expand the description of *how* men work with more geographical explanation of the *why* of the industrial situation. Similarly others may wish to enlarge on the theme of transportation or the problem of men versus machines. Nevertheless, the book provides excellent, thought-provoking material for children of Grades VI-IX.

The mechanical makeup of the book is attractive. The print is a little larger than that in the usual textbook, and the pictures are large, clear, and usable. There is a dearth of maps and graphic illustration.

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